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Merit the purchaser recognizes

MANY of the sterling qualities of human character have a lot in common with the merits of most successful products. These qualities may be hidden to the casual observer, but the test of time usually brings true value to the foreground.

Such products as Commonwealth Vanillin and Coumarin well illustrate this point. Even though used in comparatively small quantities, their absolute purity—their never varying uniformity—help your product win a lasting reputation for sterling quality.

Commonwealth dependability

Specially sealed air-tight containers, lined with tear-proof paper, protect Commonwealth products against contamination and insure delivery in their original purity.



is something you can rely upon season after season, year after year. It has helped many manufacturers attain a reputation for quality that results in constantly increasing sales and rapidly growing popularity.

Let the nearest Mathieson District Office supply you with Commonwealth products. Complete warehouse stocks are maintained in principal cities.

Commonwealth Division

The MATHIESON ALKALI WORKS (Inc.)
250 PARK AVENUE



PHILADELPHIA, CHICAGO,
PROVIDENCE, CHARLOTTE, CINCINNATI



DEAL DIRECT WITH THE MANUFACTURER

WORKS: NIAGARA FALLS, N.Y.
SALTVILLE, VA. • NEWARK, N.J.



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The Manufacturing Confectioner's Approved Advertising of Confectioners' Machinery and Supplies

and Miscellaneous Advertising Directed to Manufacturing Confectioners

POLICY: THE MANUFACTURING CONFECTIONER is essentially a manufacturers' publication and therefore is a logical advertising medium only for confectioners' supplies and equipment. The advertising pages of THE MANUFACTURING CONFECTIONER are open only for messages regarding reputable products or propositions of which the manufacturers of confectionery and chocolate are logical buyers.

This policy EXCLUDES advertising directed to the distributors of confectionery, the soda fountain and ice cream trade. The advertisements in THE MANUFACTURING CONFECTIONER are presented herewith with our recommendation. The machinery equipment and supplies advertised in this magazine, to the best of our knowledge, possess merit worthy of your careful consideration.

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Gold Seal Oil Peppermint

(*Triple Distilled*)

UNGERER Gold Seal Peppermint Oil is more than a good redistilled oil. It represents natural peppermint oil of selected quality redistilled to meet the U. S. P. requirements and then fractionated further for the removal of any traces of terpenes and resinous bodies.

The result is a crystal clear, water white oil with a smoothness and refinement of flavor impossible in an oil not so treated. The increased cost per hundred pounds of candy compared with the use of ordinary U. S. P. peppermint is infinitesimal and negligible while the improvement in the flavor of the product is plainly noticeable to anyone.

"Our Quality is Always Higher than Our Price"

**UNGERER & CO.
NEW YORK**



**TRY IT in your fall line of
Caramels, Fudges, Nougats, Kisses and
All Chewing Candies--also in fillers for
Satin Finish and Plastic Goods**

There's a GLIDDEN HARD BUTTER especially adapted to the individual requirements of each confection. Every ounce a quality butter.

May we submit a batch size sample or quote you on a butter suitable for your specific needs? Let us in on your "planning conference" for new goods—because

"We know our fats"

GLIDDEN FOOD PRODUCTS
Office and Refinery: 2670 Elston Avenue, Chicago, Ill.

Complete Warehouse Stocks Maintained at Principal Distributing Centers

Co-operating with





Hold that Flavor with **SOLV-O-HOL**

SOLV-O-HOL does NOT evaporate—it holds the flavor.

SOLV-O-HOL the only non-alcoholic solvent that is completely odorless, tasteless and less toxic than alcohol.

The following **HARD CANDY FLAVORS** made with **Solv-O-H** I can now be had:—

Cherry

Grape

Honey

Pineapple

Pistachio

Raspberry

Root Beer

Price:

\$3.00 per lb.

Strength:

¾ to 1 oz. per 100 lbs. Hard Candy

Results:

Better than anything on the market today.

ALSO

Lemon Concentrate \$11.50 per gallon

Orange Concentrate 21.00 per gallon

Our **leader**: same strength as Oil Lemon and Oil Orange.
Perfect products for hard candies!

FELTON CHEMICAL CO., Inc.

MANUFACTURERS OF FLAVOR RAW MATERIALS

599 Johnson Avenue

Brooklyn, N. Y.

Chicago Stock Carried at:

FELTON CHEMICAL COMPANY, INC.

208 North Wabash Avenue, Chicago, Ill., Tel., Dearborn 6537

A. S. LA ZORIS, Mgr.

The Modern Type of Hard Candy Flavors

as introduced by us several years ago now constitutes standard practice for more than 80% of the leading manufacturers of hard goods in the United States and Canada.

IT is one of the misfortunes attendant on success in any line—and an unfailing indication as well—to be followed by a host of imitators.



That the numerous imitators of our Special HARD CANDY FLAVORS have been notable chiefly for their intent and desire, while quite lacking in the accomplishment thereof, offers eloquent tribute to the thoroughness with which we originally attacked—and suc-

cessfully solved—the problem of flavoring hard boiled candies in a manner to conform to present day tastes.



These inimitable combinations of delicious fresh fruit concentrates with carefully chosen fortifiers and scientifically designed fixatives, are available to every confectioner in the **original** form which won for them their present place of leadership.

Why use a substitute?

They are delicious, economical and convenient. Very useful in other confections, too, where elevated temperatures are met.

Gums, Jellies, Chewing Gums, Taffees, Lollypops, Fruit Drops are all raised to a high plane of excellence by the use of these unique flavoring agents.

Fifty different fruit, floral and special types are available.

Full information on request.

FRITZSCHE BROTHERS, Inc.
“A FLAVOR FOR EVERY PURPOSE”

CHICAGO
118 West Ohio Street

NEW YORK
78-84 Beekman Street

TORONTO
93-95 Church Street

INSURED SATISFACTION



TO insure satisfaction to our customers, Spencer Kellogg and Sons must be able to command adequate supplies of material economically, and to control its products until they are in the hands of the users.

To do this, we have established a branch in the East Indies. We buy our own copra, we crush it ourselves in our plant in Manila, ship the oils to our own refinery in Edgewater, N. J., where they are subjected to our own exclusive methods of treatment.

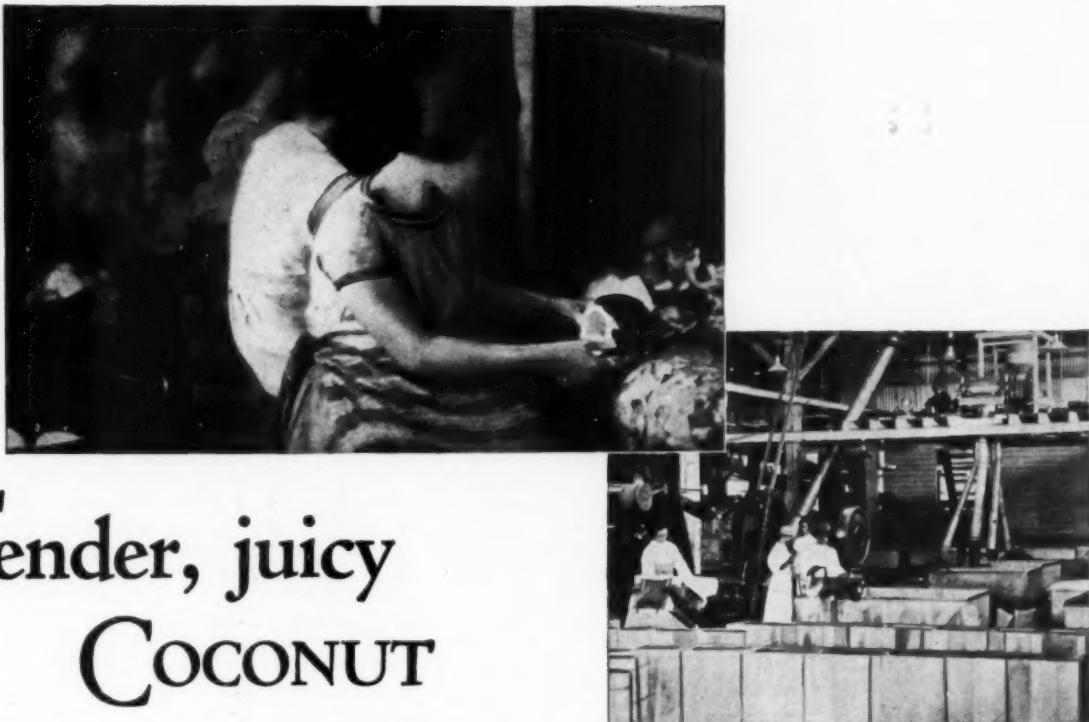
From source to sale we control every step; make absolutely sure that our customers will be satisfied.

KELLKO Hard Butters
 KELLOLINE Soft Butters
 KELLOGG Plastic Butters
 KELLOGG Edible Coconut Oil

SPENCER KELLOGG AND SONS, Inc.
 Buffalo, N. Y.

Warehouse Points

Baltimore
 Boston
 Chicago
 Cincinnati
 Cleveland
 Columbus
 Detroit
 Indianapolis
 Kansas City
 Los Angeles
 Milwaukee
 Minneapolis
 New York City
 Philadelphia
 Pittsburgh
 St. Louis
 San Francisco
 Toledo



Tender, juicy COCONUT

. . . adds richness to your candies

IN THE SHADE of Philippine coconut palms, busy expert hands are opening the shells of coconuts.

The sweet, white meat is taken out, moist and tender . . . plunged into a bath of clear running water . . . put through a huge shredding machine . . . then quickly packed for shipment to you—with every bit of its native tropic flavor retained.

This is the Franklin Baker way of making coco-

FRANKLIN BAKER'S COCONUT

Sold by Baker Associated Companies, Inc., 15th and Bloomfield Streets, Hoboken, N. J. In Canada — Franklin Baker, Ltd., 812 Metropolitan Bldg., Toronto 2, Ontario

©1928, F. Co. Inc.

nut. This is why Franklin Baker's Gem Coconut brings your candies the delicate juicy sweetness of tropical flavor.

A single company controls every step . . . shelling, shredding, packing. The result is coconut that gives your candies richer flavor, firmness, freshness.

Try Franklin Baker's Coconut. See how noticeably it improves your candies. Write today for a free sample to test in your favorite formula.



Baker Associated Companies, Inc.,
15th and Bloomfield Streets, Hoboken, N. J.

Please send me, without obligating me in any way, samples of Baker's Gem Coconut.

Name _____

Address _____

Mfg.-C-12-28



Hard Candy Flavors

Specially prepared to withstand the high degree of heat necessary in making hard candy.

Flavoring cost $\frac{1}{2}$ cent per pound

Cosco Hard Candy Flavors impart a delicious, fresh fruit taste to the finished candy.

ASSORTMENT:

Cherry Tame	Raspberry
Cherry Wild	Pineapple
Grape	Strawberry

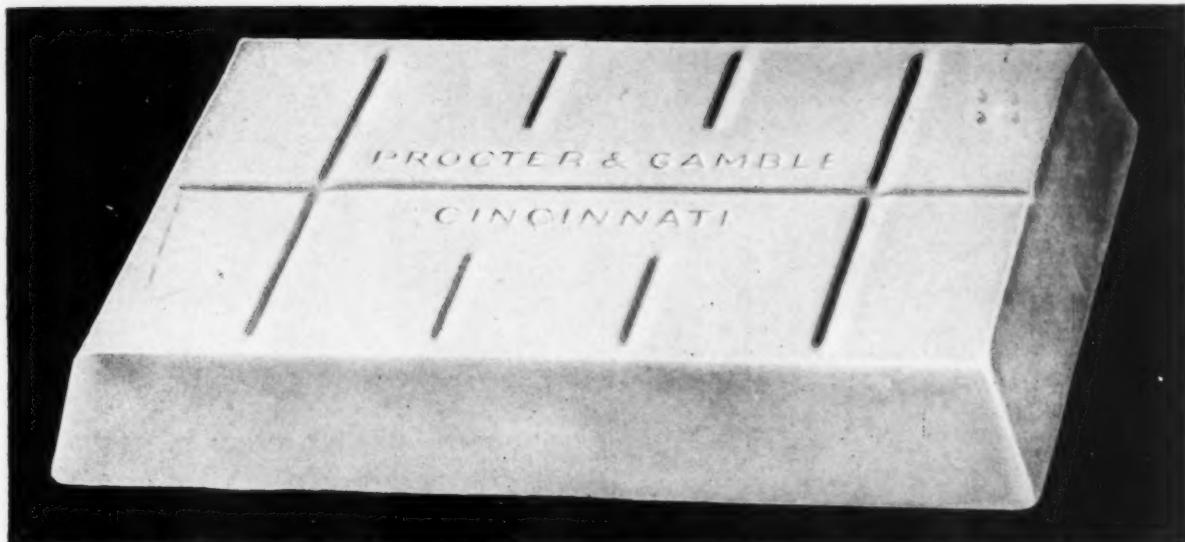
Root Beer

Order a trial pint on approval

SETHNESS COMPANY

659 Hobbie Street
Chicago

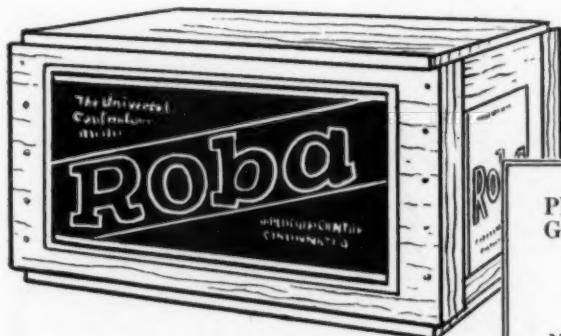
1133 Broadway
New York



For your convenience

Every ten-pound cake of Roba is scored in one-pound divisions so that your candy man can measure off the desired weight of Roba quickly and accurately. This in itself is a comparatively small matter. It simply illustrates how Roba is made with the candy man's problems in mind.

The strict standards of uniformity to which every batch of Roba must conform assure a product which can be depended upon for uniform results in candy making. Careful selection of raw materials and equally careful refinement has made Roba a particularly fine coconut butter for this purpose.



Send for a Free Sample of Roba

Largely on the recommendation of their chemists, many leading candy makers have standardized on Roba for products which require a hardened confectioner's butter. Let your own chemist put Roba to the test. Mail us the coupon and we'll send you a free sample of the melting point you desire.

Note these 7 distinct advantages of Roba:

- 1 Positive uniformity. Each batch is exactly like the previous lot.
- 2 Six carefully determined melting points (84°, 88°, 90°, 92°, 94°, 96°).
- 3 Strikingly narrow "mush point." Goods made with Roba stand up under extremely trying conditions.
- 4 Made only from the very cream of coconut oil by America's largest manufacturers of edible fats.
- 5 Bland and neutral. Roba cannot interfere with the true taste of your most delicately flavored goods.
- 6 Moulded in 10-lb. cakes, scored in 1-lb. graduations. You can quickly and accurately measure the exact amount you need.
- 7 The all-around confectioner's hard butter. Use Roba for coatings, caramels, nougats, scotches, toffees, kisses, chewing candies.

PROCTER & GAMBLE

Mail this coupon

PROCTER & GAMBLE (Roba Dept. Desk 12-B)
Gwynne Bldg., Cincinnati, Ohio.

Please send me free a test sample
of Roba ° m. p.

Name.....

Firm Name.....

Business Address.....

City..... State.....

Delicious Nut-Meat SPECIALTIES

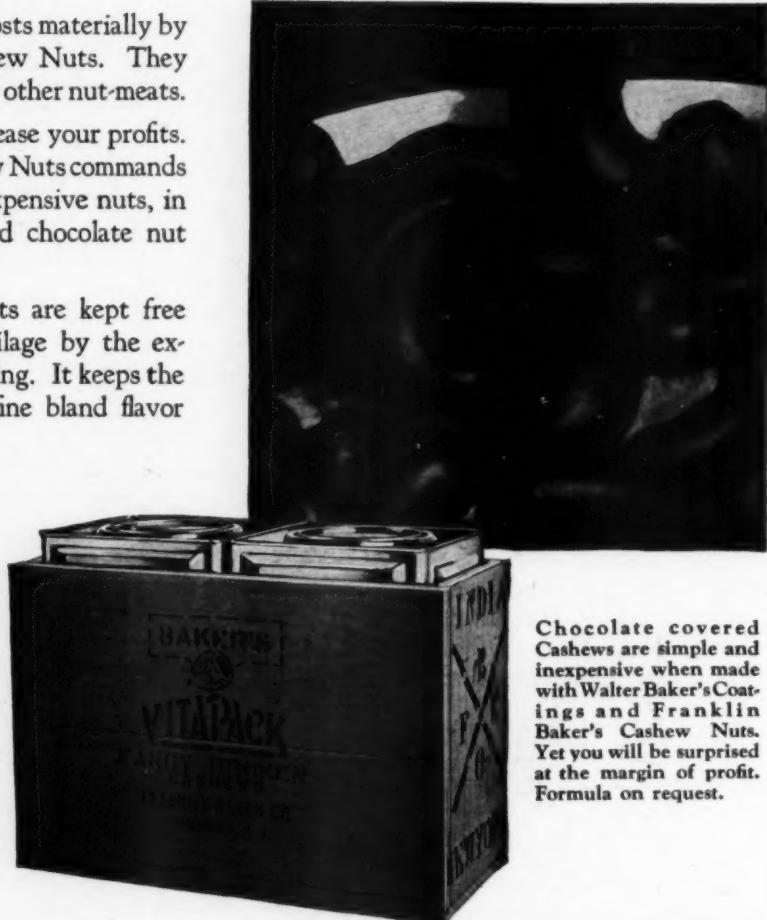
at lower cost . . . greater profit

YOU can cut your nut-meat costs materially by using Franklin Baker's Cashew Nuts. They are less expensive than almost any other nut-meats.

And at the same time you increase your profits. For the fine bland flavor of Cashew Nuts commands the same retail prices as more expensive nuts, in nougats, brittles, nut-glacés, and chocolate nut combinations.

Franklin Baker's Cashew Nuts are kept free from insect infestation and spoilage by the exclusive Vitapack method of packing. It keeps the nuts fresh and clean, all their fine bland flavor preserved.

Try Cashew Nuts in your own nut-meat candies. Or we will gladly send you tested formulas for specialties that others have found successful. Mail the coupon. Baker Associated Co., Inc., 15th and Bloomfield Sts., Hoboken, N. J.



Chocolate covered Cashews are simple and inexpensive when made with Walter Baker's Coatings and Franklin Baker's Cashew Nuts. Yet you will be surprised at the margin of profit. Formula on request.

FRANKLIN

BAKER'S
VITAPACK
CASHEW NUTS

Baker Associated Companies, Inc.,
15th & Bloomfield Streets, Hoboken, N. J.

Please send me a trial package of Franklin Baker's Vitapack Cashew Nuts Fancy Broken . . . Standard Broken . . . Please send me formula . . .

Print name and address—Mark X for choice.

Name _____

Street _____

City _____ State _____

If Canada: address Franklin Baker, Ltd., 812 Metropolitan Bldg.,
Toronto 2, Ontario.

Mf. C. 12-28



The Trouble Shooter is a Practical Man

THE Best Foods Trouble Shooter always has something worth while to say about hard and soft butters.

He knows them from A to Z. And he knows how they can be used most effectively in the production of icings, fillings, salted nuts and candy.

The Trouble Shooter has more than just a laboratory knowledge of butters. He has worked with manufacturers in their own plants. He has helped them solve actual manufacturing problems. He has had a broad and practical experience in his field.

There are lots of things he does not know about your business, but he is well qualified to talk to you about your hard and soft butters.

There are several Best Foods Trouble Shooters. If you will let us know, we will have one call on you.



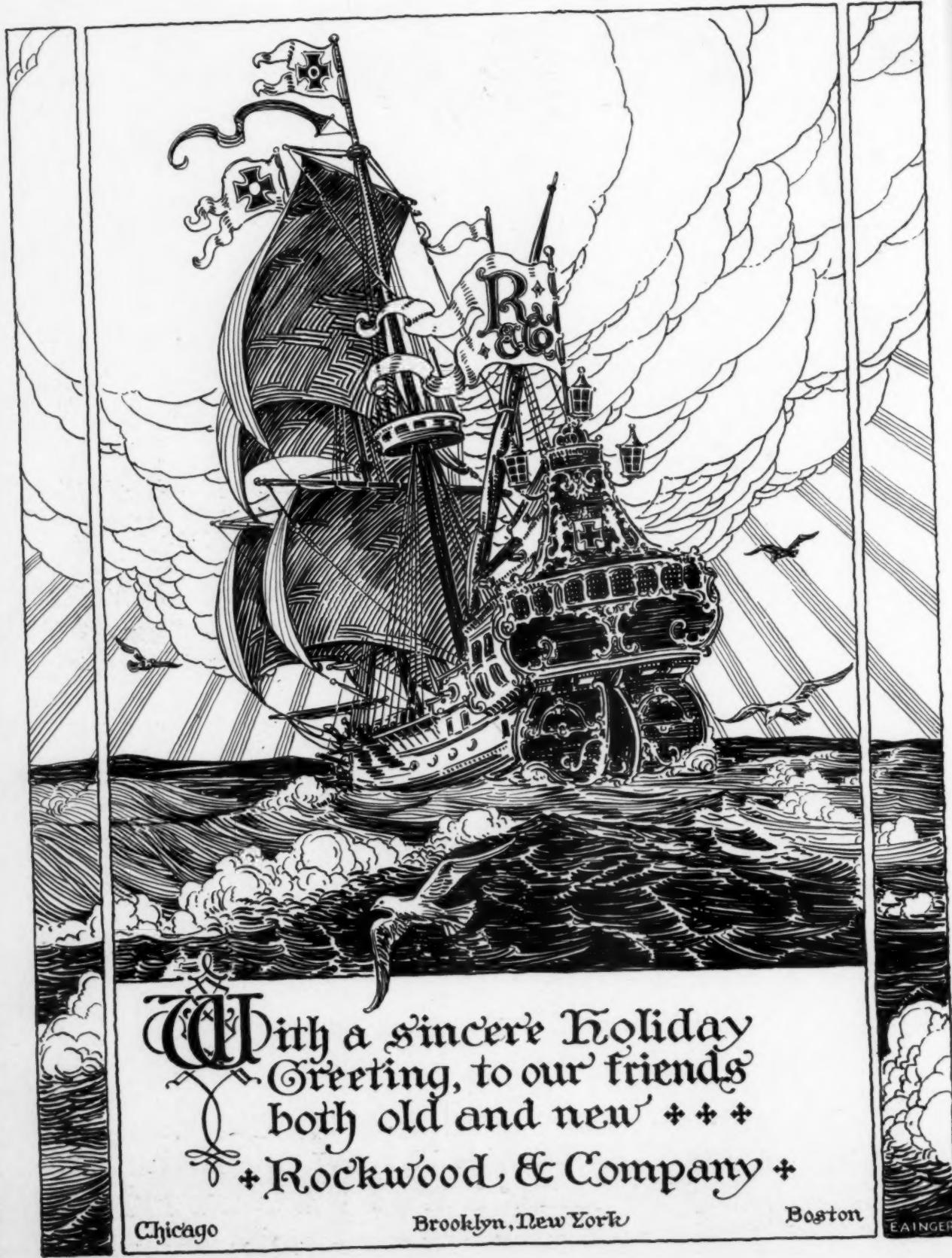
NUMBER FIFTY BUTTER *Phenomenal!*

We knew we had a superior product to offer when we announced to the trade our Number Fifty Butter. But even we could not foresee that the reaction would be so favorable, the demand so great, from every section of the country.

Field Service

The Best Foods Inc.

297 Fourth Avenue - - - New York City



With a sincere Holiday
Greeting, to our friends
both old and new ***
F. Rockwood & Company *

Chicago

Brooklyn, New York

Boston

EINGER



Now—an automatically fed tablet-wrapping machine

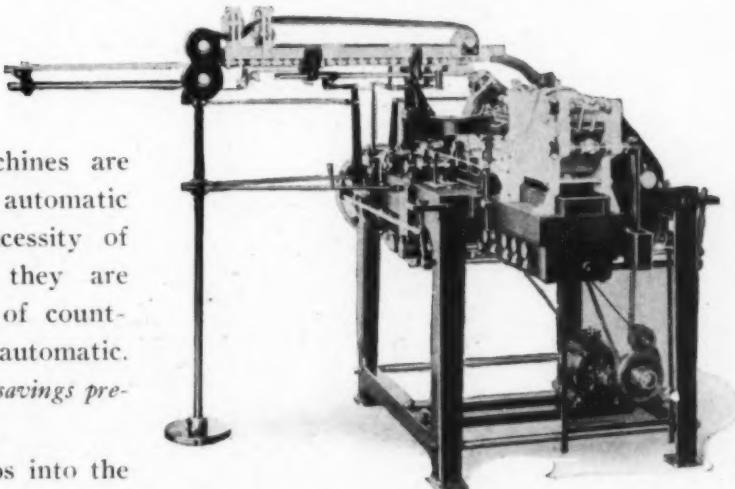
OUR tablet-wrapping machines are now equipped with an automatic feed which eliminates the necessity of stacking the tablets before they are wrapped. The entire process of counting, stacking and feeding is automatic. *This improvement has doubled the savings previously effected by our Model EE.*

The machine stacks the drops into the required number, wraps them in reinforced foil cut from a roll, and bands the wrapping in a printed label sealed with paste.

If you are making fruit drops, mints, or other candy in tablet form, this is the machine you need to increase your profits.

Moisture Protection

For products requiring moisture protection, the machine can be made to wrap in wax paper, sealed with heat, the product



travelling automatically to a second machine which puts on the foil and band.

Beechnut Fruit Drops, Life-Saver Fruit Drops, Lance Cough Drops, Mars Chocolate Bits, Payroll Lozenges are all wrapped on our machines.

If you have a product which you think can be merchandized to advantage in this type of package, consult us. We will be glad to give you every assistance.

PACKAGE MACHINERY COMPANY

NEW YORK
30 Church Street

SPRINGFIELD, MASSACHUSETTS

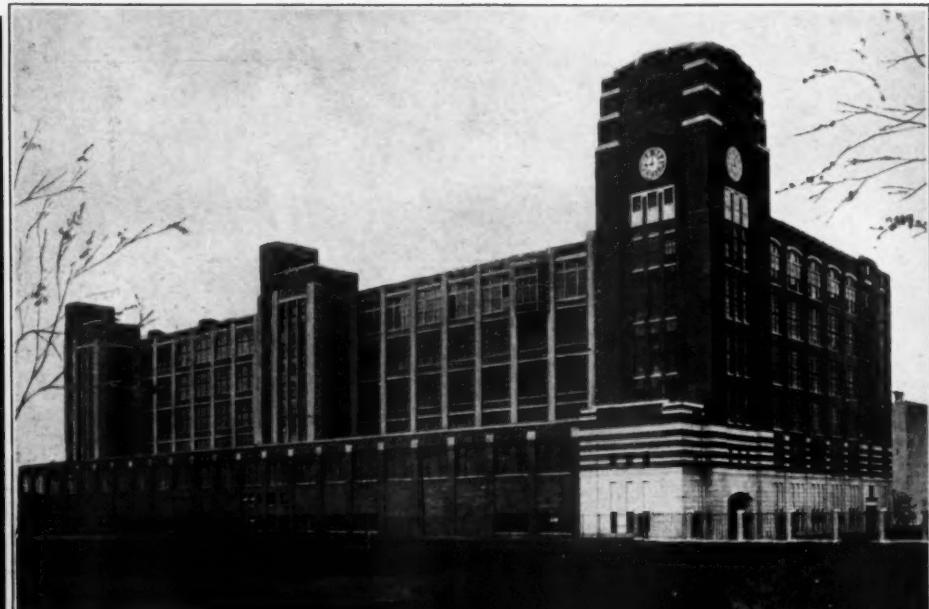
CHICAGO
111 W. Washington St.



PACKAGE MACHINERY COMPANY

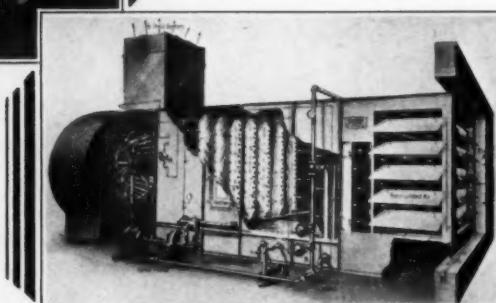
Over 150 Million Packages per day are wrapped on our Machines

Manufactured Weather



Schrafft's new factory at Boston, where Manufactured Weather makes "Every day a good day" for each department and product.

Five Carrier Centrifugal Refrigeration Units fulfill all of the cooling and refrigeration requirements in this great candy factory. The first Carrier Centrifugal Refrigeration Unit to be placed in operation was installed in the old Schrafft plant in 1923. This machine, after five years' operation, is in perfect condition and is one of the group shown above.



Typical Carrier Air Conditioning Equipment, showing the automatically controlled dampers, the spray chamber and the fan. Here the air is washed and humidified or dehumidified according to requirements.

Manufactured Weather makes

Carrier

New York Philadelphia

d Weather in SCHRAFFT'S

IN Schrafft's thoroughly modern new factory at Boston the absolute uniformity and high quality of their confections may be attributed in no small degree to *Manufactured Weather*.

For *Manufactured Weather*, as produced only by the Carrier System for Air Conditioning, assures that positive and automatic control of temperature, humidity, air movement and air purity for every process and product so essential to the manufacture and storage of high grade confections.

In Schrafft's, as well as in many of the world's other fine confectionery plants, this very important element of weather control is a highly essential contributing factor in maintaining quality standards and scheduled production, regardless of season or outdoor weather; it assures ideal working conditions; it makes formulae changes unnecessary; it means maintaining exactly those atmospheric conditions best suited to each operation in manufacturing, packing and storage departments.

And now the *Carrier Unit Air Conditioner* is offered, making it possible for any manufacturer, no matter how small his plant, to enjoy these same advantages of *Manufactured Weather* which heretofore have been available only to the larger factories.

We shall be pleased to have you write for literature, and also ask for a visit from one of our engineers, who will tell you, without obligation, how to make "Every day a good day."

conditioning
the auto-
meters, the
fan. Here
humidified
ing to re-

Carrier Engineering Corporation

Offices and Laboratories
NEWARK, NEW JERSEY

New York Philadelphia Boston Chicago Cleveland
Washington Kansas City
Los Angeles



The Carrier Unit Air Conditioner

This portable Unit has been designed to extend the many advantages of *Manufactured Weather* to even the smallest factory or individual department. It is particularly adaptable to hand-dipping, machine enrobing and hard candy rooms, to packing departments and to manufacturers' and jobbers' storage rooms. The Unit is extremely compact, simple and effective. It requires only simple steam, water and electrical connections.

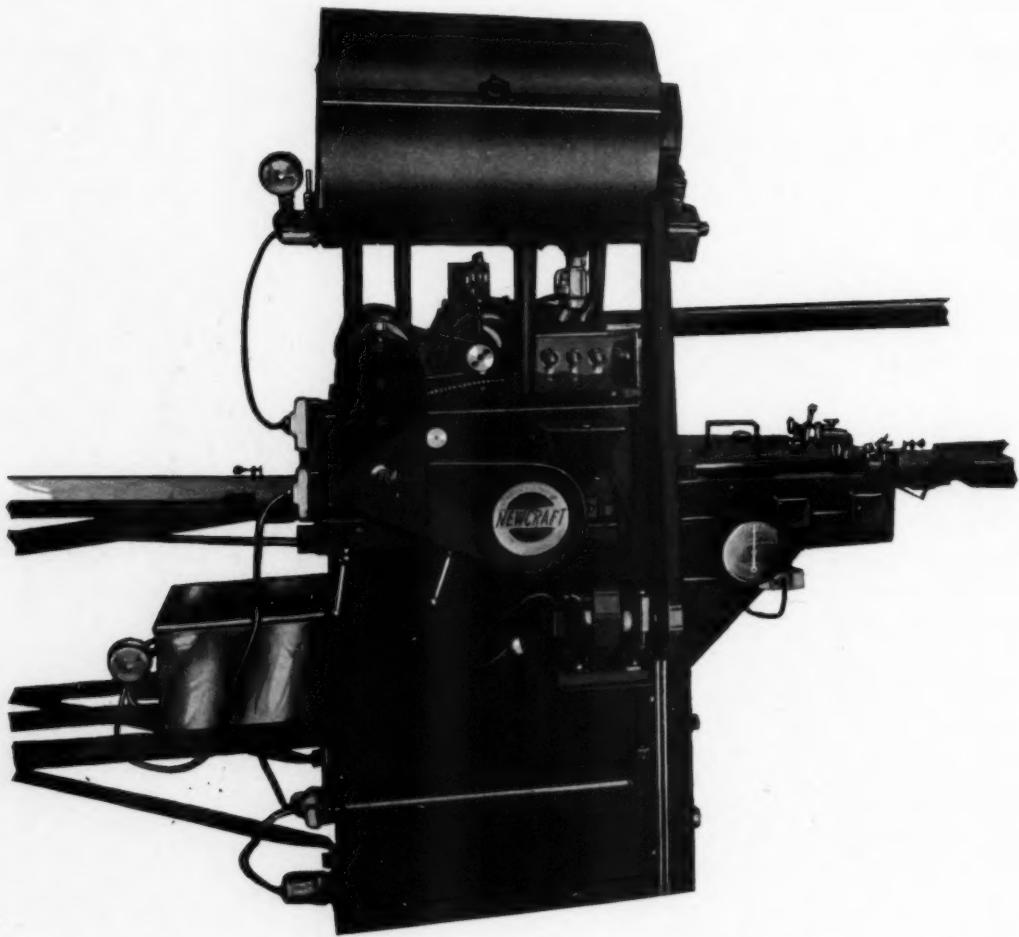
Write for Bulletin C-17

"The Carrier Unit Air Conditioner"

"Every day a good day"

NEWCRAFT Challenges You!

PATENT APPLIED FOR—SEE SPECIAL FEATURES



This model is the result of five years' experience under conditions such as exist in the small candy industry.

MELTING KETTLE

Our Aluminum Jacketed Melting Kettle (shown in illustration) is extra, allowing constant melting of chocolate that flows directly into machine without extra handling. Price of kettle \$150.00.

Manufactured by

NEWCRAFT COATING MACHINES
SPRINGFIELD, MASS.

See our classified ad. in this issue.

You Coating Machine Troubles

with the First Completely Water Jacketed Confectionery Coating Machine Ever Offered to the Candy Industry

COMPLETELY JACKETED

This feature controls the temperature so that every part of machine comes in contact with the coatings, thus eliminating the customary troubles or delays that are sometimes caused by the overheating of metals, maintaining same consistency and temperature twenty-four hours a day, making instant operation possible at any time.

DISC PRINCIPLE

A very important principle of the NEWCRAFT COATING MACHINE is contained in the disc conveyor (which is patented) by which the chocolate or other material from the drip pan is conveyed to the overhead feed bar. The very simplicity of this operation is the factor that makes its functioning perfect, and around this principle are built the other simplified mechanical operations that combine to make the "Newcraft Disc" the excellent machine that it is. The discs at each side of the machine revolve with the lower sector immersed in the tank of material. A certain amount of the melted stock adheres to the disc sides and is conveyed to the top where a knife scrapes the material from the disc and directs its flow into the pan. The knife that directs the material flow also cleans the disc for its descent into the tank. In this manner the material is kept constantly on the move and remains steadily at the same temperature and consistency. There is no hardening in transit and no opportunity for the clogging up of feed pipes, pumps or the accumulation of material. The vital parts of the machine are at all times kept clean by the disc scraper.

COOLING TUNNEL

The Cooling Tunnel is constructed so that same can be operated with Frigidaire Cooling System which Newcraft has developed, for the benefit of those wishing to operate in warm weather without the use of a cold room.

CONSTANT TEMPERATURE CONTROL

The simplicity of control is governed by the evenness of temperature of water in jacket, thereby governing the consistency and workability of coating material.

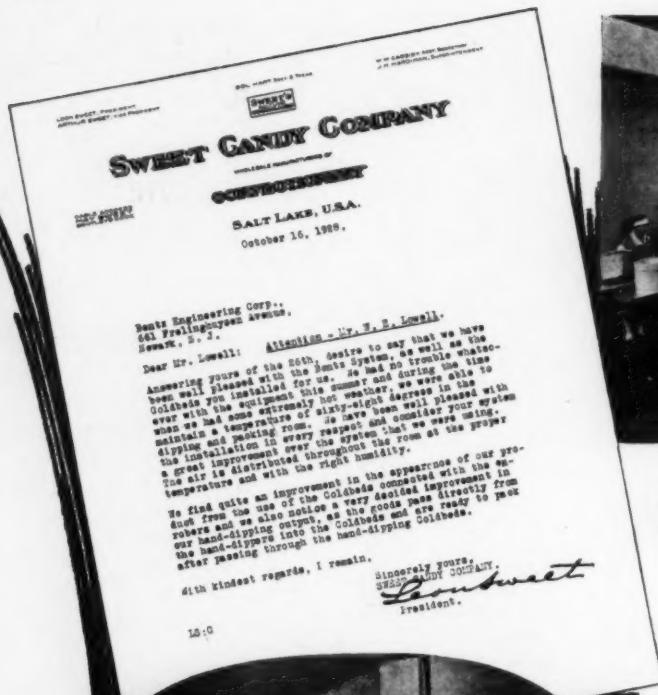
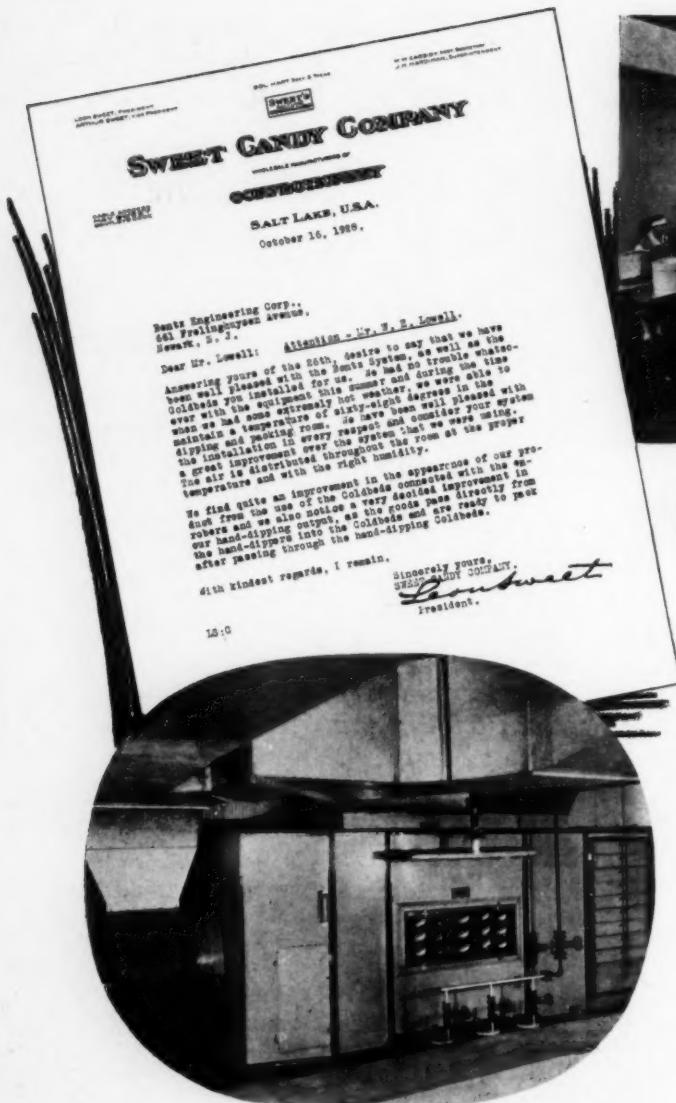
Important Notice

The disc principle in combination with our Jacketed Model, makes the most efficient machine for the manufacturing of bon bons or caramel coatings.

Manufactured by

**NEWCRAFT CO., Inc.
WELD, MASSACHUSETTS**

Issue. Startling prices on new stock machines of former models.



Mr. Sweet says:

**- "a very decided im-
provement in our hand-
dipping output" - - - -**

After all, the beauty and artistry
of the most expert hand-dipping
can be marred and dissipated
through improper cooling—and that
is a source of trouble definitely
eliminated by the

Bentz "COLDBED" PATENTED

for Hand-dipped Chocolates

It is easily explained by the principle of the Bentz "COLDBED," which is accomplished by refrigerated water in contact with the conveying belt—eliminating strong blasts of air, so detrimental to the appearance of the chocolate goods. Insures quick setting and perfect bottoms. Chocolates arrive at the packing table in same condition, cooled to just the right degree and with all the beauty of the hand-dippers' skill unmarred. Check up on your production—then investigate the Bentz "COLDBED."

A candy plant without adequate air conditioning facilities is like a packing plant without refrigeration—it is unthinkable. Let a Bentz engineer analyze your plant and show you how to overcome the difficulties of improper control of humidity. Be independent of weather conditions—operate at a higher level of profit. The Bentz "CHILLBLAST" cooler and dehumidifier is the answer. Write us today.

BENTZ ENGINEERING CORPORATION

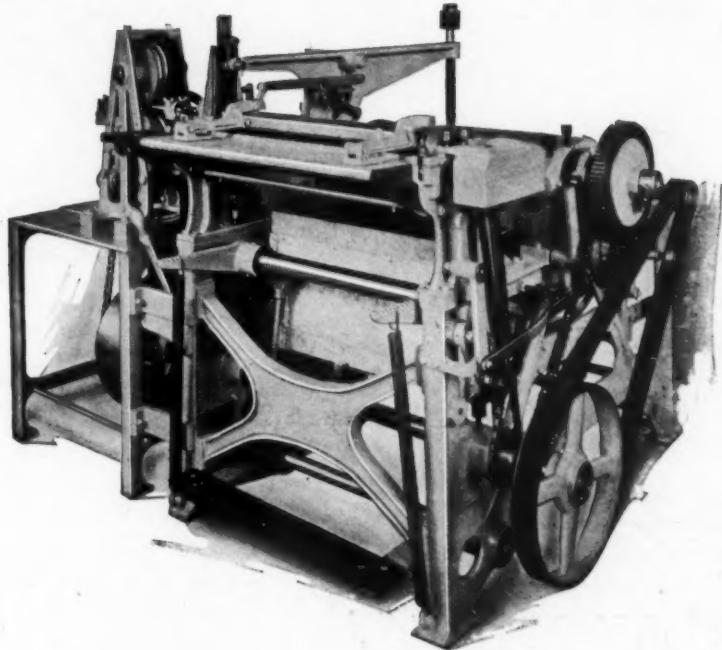
661 Frelinghuysen Ave., Newark, N. J.

New York: 122 Greenwich St.

Park Square Bldg., Boston

Builders Building, Chicago

The AUTOMATIC HARD CANDY MACHINE for SPHERICAL HARD GOODS



This machine embodies in it all the features of the Semi-Automatic Machine plus the added convenience of Sizing, Feeding, Cutting and Discharging,
entirely automatically

IT SAVES LABOR
INCREASES PRODUCTION
DOUBLES YOUR PROFITS

Full information on request—Do it now!

JOHN WERNER & SONS, Inc.
ROCHESTER. N. Y.

*Hard Candy
Producers*

Special provisions are also made for producing the now famous fruit tablets on this machine. It merits your consideration. Write us.





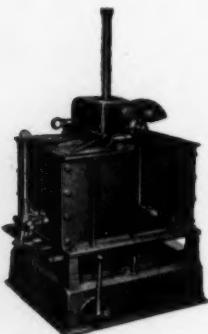
Evolution Believe it or not

THE evolution of the high-decked galleon of centuries ago to the present-day, palatial ocean steamship, is no more pronounced than the development of Cream Center Production, of the Hand-Roll Type within the last three years.

What chance would the old galleon, with all its glory, have with the modern steamship? Likewise, what a handicap confectioners are working under who persist in producing inferior centers with the cumbersome starch-casting method or by rolling them, one at a

The FRIENDSHIP Line

CLIPPER - Model "F"



For the retail store. Will handle a twenty-five-pound batch in fifteen minutes and will operate satisfactorily on as small a quantity as five pounds.

GREYHOUND - Model "E"

The usual small factory size. Will handle a sixty-pound batch in fifteen minutes. The same as Model "F" but twice the size.

DREADNAUGHT Model



A fast, powerful machine for handling one-hundred-pound batches or less, and adaptable for direct transfer of centers formed on plaques to the feed belt of any coater, without re-handling. Has automatic tray lift and cut off and is mounted on a lone table similar to "LEVIATHAN."

This is the original FRIEND MACHINE. It made one center at a time but proved the value of the FRIEND principle.

Represented in Great Britain by Bramigk & Fenner

HARRY LIFSON
52 India Street

Ample facilities for display and demonstration of all new products

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time, against competitors who are equipped with FRIEND PLASTIC CENTER MACHINES.

"Evolution," if you like, but today the FRIEND PLASTIC HAND-ROLL MACHINE is recognized as one of the foremost advancements in production of quality cream centers.

There is a FRIEND MACHINE to meet your production requirements, whether you have a small shop or the largest plant in the country.

HAND FRIEND ROLL

SAVES ninety percent labor cost of hand-rolling and space for starch-casting. Makes the highest quality and most perfectly formed hand-rolls of any shape and of any hand-roll fondant. No rolling in starch or sugar—no re-handling—no leaks. Formed without agitation or undue pressure, and consequent breaking down of the fondant before coating. They stand up.

LEVIATHAN Model

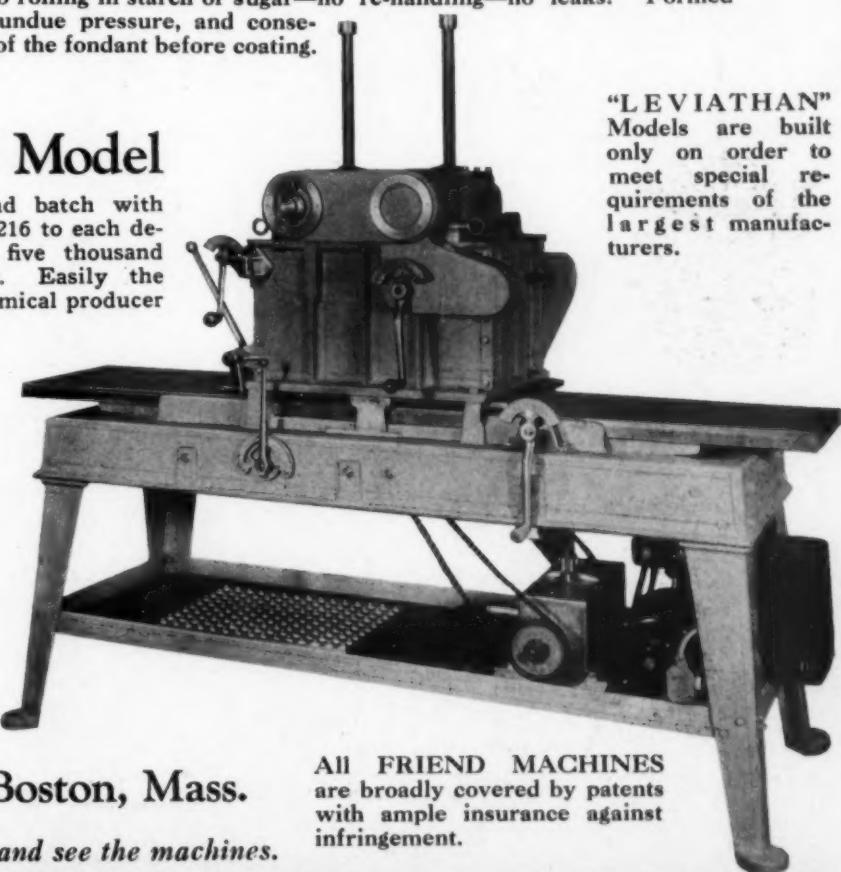
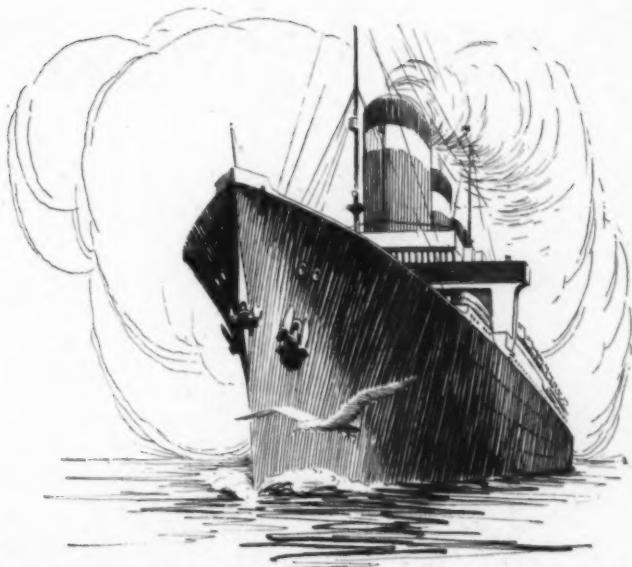
Handles a two-hundred-pound batch with maximum number of centers, 216 to each deposit. Capable of four or five thousand pounds production per day. Easily the world's largest and most economical producer of Hand-Rolls.

Like the "DREAD-NAUGHT" this model forms centers on plaques for transfer to the feed belt, or on separate trays, all ready for the hand-dippers.

migk & Fenchurch Street, London, E. C. 3.

Y FRIEND

of all at the new address. Come in and see the machines.



Boston, Mass.

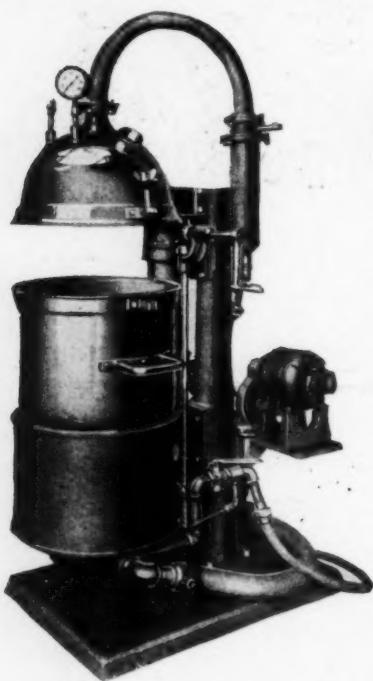
All FRIEND MACHINES are broadly covered by patents with ample insurance against infringement.

"LEVIATHAN"
Models are built only on order to meet special requirements of the largest manufacturers.

Quantity Production of High Quality—

--- START 1929 RIGHT ---

The pronounced advancement made in greater efficiency and economy in the production of confectionery is exemplified in the Simplex Vacuum Cooker. Today the Simplex is universally recognized as an all-around utility cooker adaptable to a wide range of cooking requirements. It serves with efficiency and economy, the small plant using it for many purposes and small batches, equally as well as in the largest factories where volume production on one kind of goods is the policy. The Simplex cooks all-sugar candy or any combination of sugar and corn syrup or an all corn syrup batch. It can be used for cooking soft goods, too, with equal efficiency and economy. Easily and quickly regulated to suit the requirements of each kind of batch.



To know the Simplex
is to solve many of
your cooking problems.
Write us today for par-
ticu'ars and ask us just
how it can fit your
specific needs. Start
1929 right.

SIMPLEX Gas Cooker

The Simplex Gas Cooker is simple in design and easily understood, and yet it is vastly different, embodying all the desirable features of open-fire cooking plus the advantage of vacuum evaporation. This permits drawing off the moisture without subjecting the batch to extreme high temperatures, with attendant discoloration and loss of flavor. This model handles batches from 25 to 100 lbs., each batch ready to work immediately after it is poured with no lost time waiting for it to cool. Capacity 1,400 to 3,000 lbs. per nine-hour day.

Some of the manufacturers using our equipment

Advance Candy Co., Inc.
Aetna Biscuit Co., Ltd.
American Candy Company
Ed. N. Becker Company
Beech-Nut Packing Company
John F. Birkmeyer & Sons
Frank E. Block Company
Bonita Company
Bradas & Gheens
Bradley, Smith Company
Brandt & Smith Company
Brown Cracker & Candy Co.
Brown & Haley
Bunte Bros.
Cedar Rapids Candy Co.
Charma Company
Chase Candy Company
Cosner Company
Dainty Conf., Ltd.
John H. Dockman & Son, Inc.
C. H. Doerr Co., Ltd.

T. Eaton Co., Ltd.
Elmer Candy Company, Inc.
Ganong Bros., Ltd.
Geiger Candy Company
Genessee Candy Co.
Gibsons, Inc.
E. Greenfield's Sons
Griffith Grocery Company
Griggs, Cooper & Company
Harding Bros., Inc.
Henry Heide, Inc.
Heurte, Ltd.
L. Hurn Mfg. Co.
Jenner Mfr., Co.
Robert A. Johnston Company
Kibbe Bros. Company
King Candy Co.
Life Savers, Inc.
Loose-Wiles Biscuit Co.
Lovell & Covell Co.
Wm. H. Luden, Inc.

L. Martineau, Ltd.
May Company
McCormick Mfg. Co., Ltd.
J. G. McDonald Chocolate Co.
Minnehaha Candy Co.
Mueller-Keller Candy Co.
National Biscuit & Conf. Co., Ltd.
National Candy Co.
Wm. Neilson, Ltd.
W. C. Nevin Candy Co.
Norris, Inc.
Novel Candy Co., Inc.
Nutrine Candy Co.
Pacific Coast Biscuit Co.
Park & Tilford
Parisian Chocolate Co.
Robt. H. Putnam Candy Co.
Richards-Scheble Candy Co.
Riggi Bros.
F. H. Roberts Co.
Fred Sanders

W. F. Sch...
Schwarz &...
Frank G. Showley &...
Shupe-Wil...
Snyder's,...
Sunset Ca...
Sweet's Co...
Tennessee Tri...
Tru Blue...
Villancout...
Weigell &...
John W. Weideman...
Stephen J. Willard's...
Geo. Williamson...
Geo. Zieg...
Zion Inst...

VACUUM CANDY MACHINE CO.
74 Pearl Street, Jersey City, N. J.

ity—plus— All 'Round Utility

SIMPLEX Steam Cooker

Batches from 25 to 200 lbs. can be cooked with the steam-operated Simplex and like the gas cooker each batch is ready to work as soon as it is poured—a distinct characteristic of the Simplex. No waiting and handling while cooling on slabs—no greasing of slabs—less waste and scrap salvage—less shrinkage. Capacity 2,500 to 5,000 pounds per day.

The Simplex is supreme in producing a drier, whiter, more lustrous, better lasting hard candy. It's all in the cooking and the high vacuum of the Simplex—over twenty-eight makes — insuring uniform high quality.

g ouquipment

Ltd.
olate Co.
Co.
Conf. Co.
Co.
c.
Co.
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andy Co.
andy Co.

W. F. Schrafft & Sons Corp.
Schwarz & Son
Frank G. Shattuck Co.
Showley Bros.
Shupe-Williams Candy Co.
Snyder's, Mrs.
Sunset Candy Co.
Sweets Company of America, Inc.
Tennessee Biscuit Co.
Triangle Candy Co.
True Blue Biscuit Co.
Villancourt, Ltd.
Voegle & Dinning Co., Inc.
John Wannamaker
W. H. Weatherly & Co.
Weideman Company
Stephen F. Whitman & Son
Willard's Chocolates, Ltd.
Williamson Halsel Frazier Co.
Geo. Ziegler Company
Zion Institutions & Industries

NEE CO.



The Simplex Production Unit

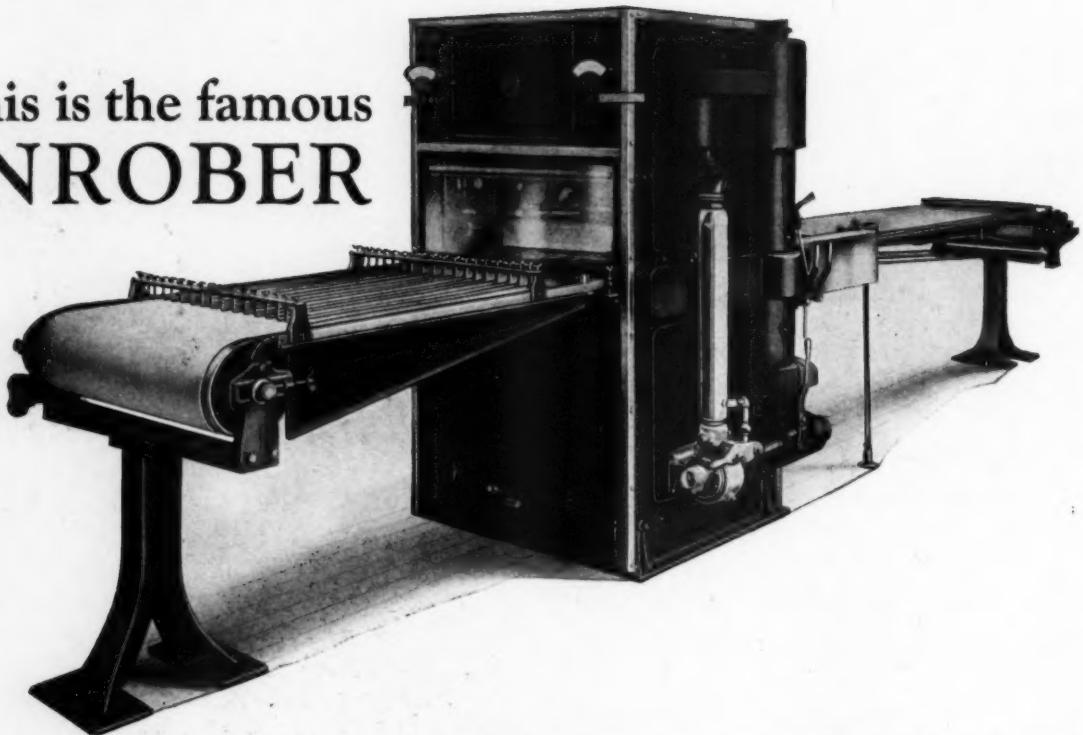
The Simplex Production Unit, consisting of one steam cooker and two or more pre-melt kettles, gives you an equipment capable of producing 5,000 pounds of high-grade candy per day. Ask us to tell you more about it. This is real quantity production with a maintenance of high quality at minimum cost.

Here's a Rare Bargain in Two Factory Reconditioned Gas Cookers

We have two gas cookers which we can offer at a very attractive low price. These were taken in trade from purchaser of our large steam unit. Thoroughly factory reconditioned and sold with our usual guarantee same as new. Subject to prior sale.

To solve your

This is the famous
ENROBER



PURCHASING COATING EQUIPMENT is not a question of price, but of machinery properly adapted to your particular plant.

For 27 years, the Enrober, a National Equipment product, has been recognized as the highest standard of Coating Equipment. Its wide adaptability embraces many features unobtainable in any other coating machine, however, to many confectionery manufacturers it represents a heavier investment than their requirements warrant.

To meet the needs of such plants, we developed the Springfield Coater, lower in price, but superior to any other coating machine, except the Enrober.

Both machines reflect the high standard of National Equipment quality. Both are fully guaranteed. One of them is adapted to your special requirements. The combination of their many years of efficient service at low cost, with their most modern improvements, make them the best buy in the Coating Equipment field. Use the coupon for complete information.

Send This Coupon Today

Date.....

NATIONAL EQUIPMENT CO.,
Service Dept.,
Springfield, Mass.

Please give us further information on the machines checked below.

- Enrober
- Springfield Coater
-
-

We understand there is no obligation to us for this material.

Name

Address

M.C. 12-28

coating problems

On No Other Machines Can You Have
All of These Improvements:

- Springfield Temperature Control
- Springfield Anti-tailing Device
- Springfield Bottoming Attachment Circulating System
- Springfield New Style Round Tank
- Springfield Improved Automatic Feeder

This is the
SPRINGFIELD
COATER

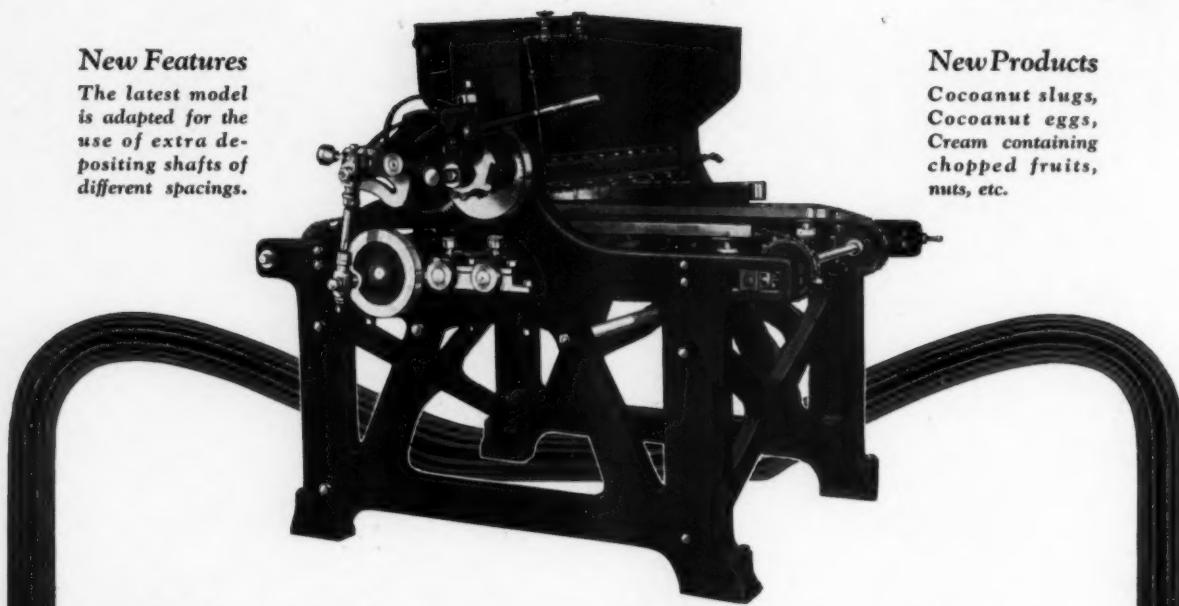
*You Can Get Them All for the
Enrober and Springfield Coater.*



National Equipment Company
Largest Manufacturer in the World of Candy and Chocolate Machinery
Springfield, Massachusetts, U.S.A.

New Features

The latest model is adapted for the use of extra depositing shafts of different spacings.



The Racine Depositor

(Patented)

For every duty a machine of this kind can perform, the Racine Depositor is distinctly superior.

Built in four different types

1—Starch Work. For all goods cast in starch including cream, gum, jelly, marshmallow, etc.

2—Cocoanut Slugs. This type also handles cocoanut eggs and cream masses containing chopped fruit, chopped nuts, etc.

3 — Solid Chocolate Stars and Kisses. It produces practically all goods of this kind made in United States.

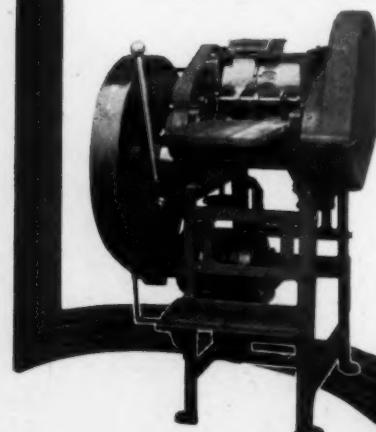
4 — Chocolate Bars. For solid chocolate cakes, nut bars or bars containing ground nuts.

Improved Racine Automatic Sucker Machine (Patented)

This is the original Automatic Sucker Machine. It created the sucker business, now a big factor in the candy industry.

With the new Duplex Rolls it has attained the remarkable speed of from three to four hundred suckers a minute.

It makes suckers of every conceivable size, shape or weight, Waffles, Satin Finish Goods, and Drop Roll work.

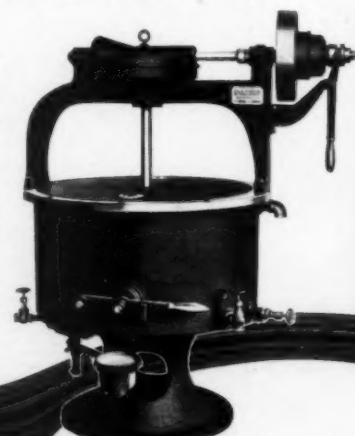


Racine Chocolate Mixer

The Racine Chocolate Mixer has every refinement that skill and experience can suggest. Note the high arch which elevates the drive pulley to a point of safety.

Oilless bushings are used throughout, which make lubrication of bearings unnecessary.

Racine Mixers are made in five sizes to meet all requirements and vary in capacity from 200 to 2000 lbs.



RACINE CONFECTIONERS' MACHINERY COMPANY
RACINE, WISCONSIN, U.S.A.

Every Day Proves Productive with the "CHINOOK"



The Profit and Loss Statement Tells a Story in Figures—

The "check up" time at the first of the year is a period in which to reflect, and usually a conference is had with the factory superintendent, to define ways and means for providing cuts in production costs; as well as fixing a program for the year.

When this time comes the stage is set for the Huhn "CHINOOK" Dryer, because of its profitable adaptation to your factory.

The "CHINOOK" re-conditions your starch

continuously without labor costs, giving you each day a starch with a predetermined moisture content—stops starch losses—releases drying room floor space—kills off "black scrap" and insures maximum production every day in the year.

The "CHINOOK" will slice a substantial profit from your present costs. Weigh well your production improvement needs for 1929 and you will find the "CHINOOK" is the equipment most urgently needed.

Huhn CHINOOK Dryer

Room 515—23-25 Beaver Street
New York City

London Representative:
MESSRS. BRAMIGK & CO., LTD.
92 Fenchurch St., London, E. C. 3
D. M. KABLE & COMPANY
Offices—Imperial Hotel, Tokyo, Japan

A. HUHN MANUFACTURING CO.

OFFICES AND FACTORY
3915 Hiawatha Avenue, Minneapolis, Minn.

A RATIONAL ATTITUDE TOWARD CANDY EATING

Modern nutrition studies demand a thorough over-hauling of the old-fashioned idea that the eating of candy is a mere indulgence.

This is not an academic question, because the whole population eats candy more or less. From the public health standpoint, therefore, it would be a distinct advantage if people were guided in their candy-eating by sound nutritional principles as to its place in the diet.

For from the standpoint of Nutrition, candy is a food. From the standpoint of the Nutrition expert, the problem is to get people to eat it sensibly, and reckon it as part of the diet.

We, the National Confectioners' Association, are putting before the public, necessarily in popularized form, the modern findings on candy as a food. Suggestions from public health workers will be greatly appreciated. On the other hand, we will be only too glad to technically elaborate our general position, as stated in our advertising, to anyone interested in public health work. This division of our activities is under technical direction, which will be glad to furnish the necessary references to anyone who cares to consult the sources.

THE NATIONAL CONFECTIONERS' ASSOCIATION, 111 W. Washington St., CHICAGO

Confectioners launch a campaign to physicians and public health workers

The Confectioners' Association, realizing the importance of having physicians and public health workers on their side, are advertising directly to them in technical publications.

The advertising consists of nothing more nor less than a frank statement of the facts (which speak for themselves) and an appeal for co-operation in the work of spreading wise dietary-counsel about candy-eating.

The first advertisement to appear is shown on this page, reduced in size. Proofs of the advertisements as they are prepared will be sent on request to any member of the Association.

>>>> Use the coupon

NATIONAL CONFECTIONERS' ASSOCIATION
180 West Washington Street, Chicago

Gentlemen:

Please send me your new system "A complete plan for a closer hook-up with the Candy Retailers."

Name _____

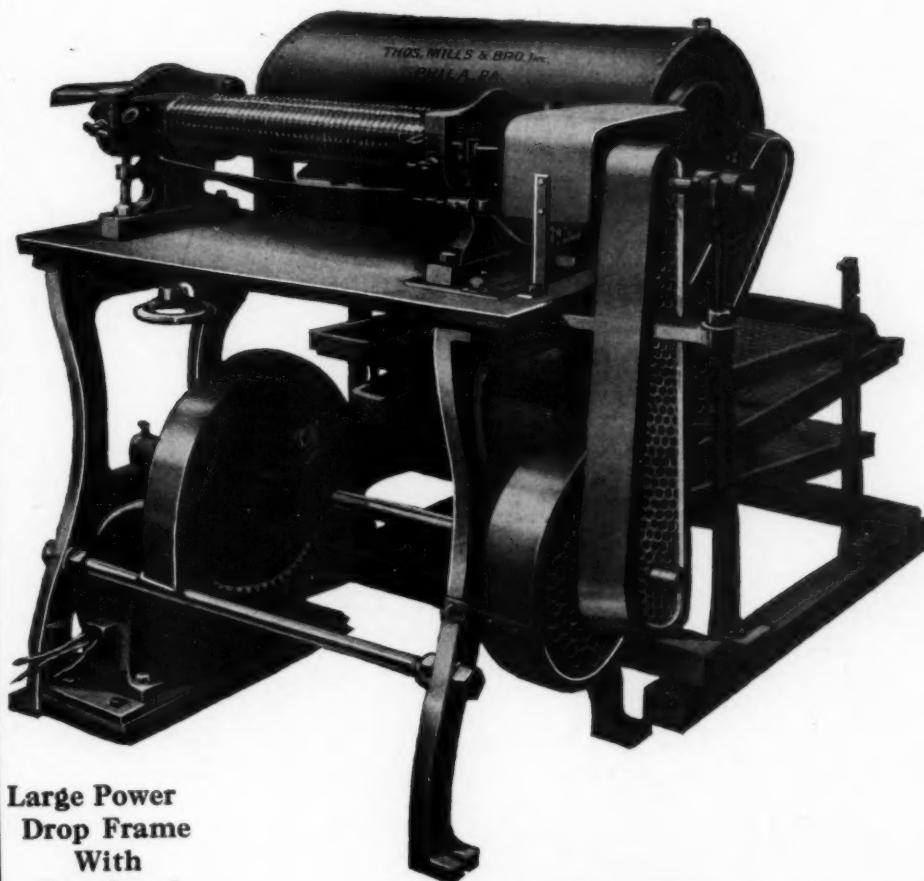
Address _____

Thomas Mills & Bro., Inc.

1301 to 1315 North Eighth St.

Philadelphia, Pa.

ESTABLISHED 1864



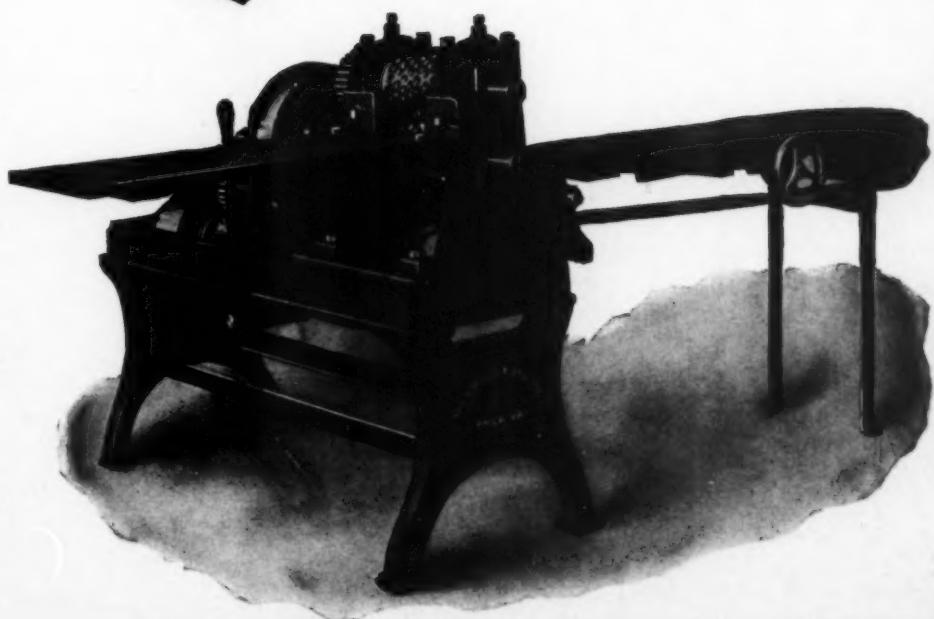
Large Power
Drop Frame
With
Stand and
Endless Belt
Conveyor
Attachments

Used In All
The Largest
Factories
For
High Grade
Hard Candies

Our Catalog
of
Confectioners
Equipment
Sent on
Request

Patent
Automatic
Seamless
Hard Candy
Machine

—
Improve Your
Production
By
Installing
This
Labor Saving
Machine
Send for Special
Circular





CANDY BOX MATS, LACES,
LAYER CARDS, DIVIDERS, ETC.

American Bon Bon Cups

America's Standard
Candy Cup

Once tried
always used

AMERICAN LACE PAPER CO.
LARGEST PRODUCERS OF CANDY CUPS IN AMERICA

MILWAUKEE, WIS.
BRANCH OFFICES IN
PRINCIPAL CITIES

Is your Package
a Silent Salesman?

• U.S. •
LABELS
AND CARTONS

WILL HELP SELL YOUR PRODUCT

Let us be your Package Counsellors

ABOUT BRAND NAMES

It is unsafe to adopt a new brand name without first making a thorough investigation to ascertain whether the name is already in use. Consult our Trade Mark Bureau. The service is free.

The United States Printing & Lithograph Co.

CINCINNATI
65 Beech St.

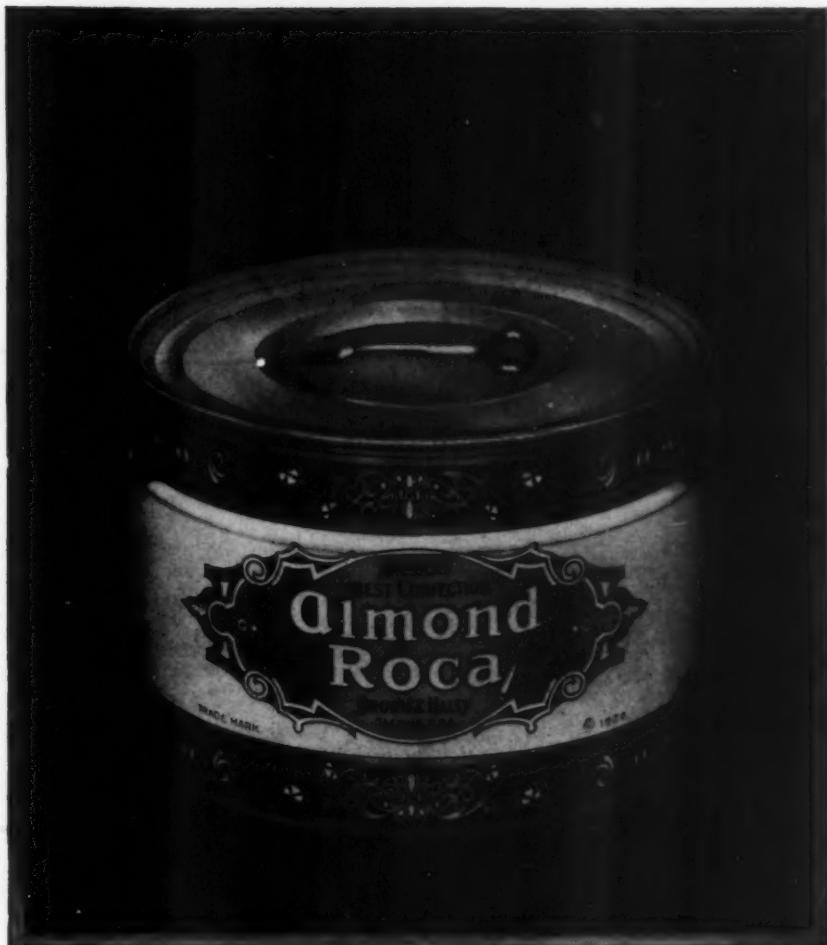
BROOKLYN
103 N. 3rd. St.

BALTIMORE
27 Cross St.

All the fresh
goodness
locked in

Almond Roca
Made by Brown & Haley
Tacoma, Washington

Hermetically sealed from factory to home, in an attractive decorated metal box. All the eater has to do is twist the key as pictured; and it is as easy as it looks, with the Canco herring bone scoring to make it so. Top goes back on as a cover after opening.



. . . but the key unlocks it easily

ALMOND ROCA is the same in New York as in its home town of Tacoma. There is no limit to its market, because it is so packed that it reaches the eater *fresh* in any climate, any distance from the factory.

The Canco package makes this practical. In its special container the confection is sealed airtight, surrounded by an inert gas so that nothing can impair the flavor or freshness.

Yet the key unlocks this sealed can as easily as you would wind a clock. And

the top fits on again neatly, making a tight cover as long as the package is in use.

Canco decorated metal packages are good for sales of any kind of confectionery. Here is a specially delicate variety, where a special Canco package and packaging method spread the sales area over the entire country. Have you ever talked with a Canco representative about your distribution and sales problems, and what a better package might do for you? You'd incur no obligation, and you'd learn something.

AMERICAN CAN COMPANY
CONTAINERS OF TIN PLATE - BLACK IRON - GALVANIZED IRON - FIBRE

METAL SIGNS AND

DISPLAY FIXTURES



NEW YORK

CHICAGO

SAN FRANCISCO



"EXACT WEIGHT" SCALES

¶ The ONLY SCALES in the WORLD that give one hundred 1 lb. packages from one hundred pounds of bulk weight in fast weighing — — —



How Long Can Your Business Stand a 1.52% loss?

If you are losing only a quarter ounce in overweight on your one-pound packages . . . and this is a very conservative estimate, then you are suffering a loss of 1.52%, or in other words you are GIVING away a ton of expensive candy every time your packing department turns out 128,000 one pound packages!

This gives you an idea of the importance of overweight . . . It shows by startling example how foolish it is to tolerate an insidious hourly waste such as this. Modern competitive business can not afford such a drain . . . for long.

Thousands of manufacturers, many of them manufacturers of confectionery like yourself, have solved the overweight problem forever . . . by the simple matter of installing "EXACT WEIGHT" SCALES. Why don't YOU make war on overweight during 1929?

May we tell you the story about "EXACT WEIGHT" SCALES? May we send a list of manufacturers who have found "EXACT WEIGHT" SCALES to be the best kind of overweight insurance they can buy?

THE EXACT WEIGHT SCALE CO.
(FORMERLY THE SMITH SCALE CO.)

512 W. Spring St.,
Columbus, Ohio

*Canadian
Representatives*
W. & T. AVERY, Ltd.
Toronto Montreal



This "Visible Deliciousness" *Helps Your Salesmen Sell*

THE makers of Tom's Nut Bars know that the salesman who carries duPont Cellophane-wrapped packages in his sample case has a big advantage.

Jobbers see at once what this 100% transparent wrapper means as a selling argument. Cellophane helps a manufacturer get enthusiastic cooperation from any distributor's sales force.

And the retailer welcomes transparent Cellophane because it gives his merchandise the best opportunity to show how

good it is—to sell itself on his counter. And Cellophane keeps it attractive—clean and in good condition.

Then, too, the New Moistureproof Cellophane may be a solution for some of your sales problems. Let us tell you about it.

Samples on request

DU PONT CELLOPHANE CO., Inc.
2 Park Avenue, New York City

Canadian Agents:
WM. B. STEWART & SONS, Limited, Toronto, Canada

Pacific Coast Agents:
ZELLERBACH PAPER CO., San Francisco, California



Cellophane

Cellophane is the registered trademark of Du Pont Cellophane Company, Inc., to designate its transparent cellulose sheets and films, developed from pure wood pulp (not a by-product).

When you need FOOD COLORS

Let your first thought be

ATLAS

Manufactured by

—KOHNSTAMM—

First Producers of
Certified Colors

Strength

Brilliance

Purity

Uniformity



Established 1851

The Atlas Label is Your
Protection

H. KOHNSTAMM & CO., Inc.

NEW YORK, N. Y.
83-93 Park Place

CHICAGO, ILL.
11-13 Illinois St.



THANK YOU ~

We heartily thank our host of manufacturing confectioner friends for their loyal patronage during the past year.

STALEY SALES CORPORATION

Crystal
CORN SYRUP
(UNMIXED)

DECATUR, ILLINOIS

Confectioners'
Starches



Editorial

ROBERT RANDOLPH, Editor

The Trouble Factory

AMOST promising development of supplier-cooperation in the confectionery industry is the "trouble" factory. No longer need the confectioner with narrow contacts or limited capital grope in darkness for lack of expert technical advice or adequate laboratory facilities. At every hand, supported by far-sighted supply manufacturers or their trade associations, experimental candy factories and "trouble-shooting" laboratories are rapidly springing up to help them solve the everyday problems of confectionery manufacture. While it is true that several of these have been playing Good Samaritan to the trade for a number of years, only recently has there been a general recognition among supply manufacturers of the tangible benefits to be derived through working out the problems raised by their materials in close working cooperation with the men who use them.

Taking a cue from these pioneers in good-will advertising, prominent corn syrup refiners, gelatine manufacturers, cocoanut oil refiners, specialty and flavor houses, have equipped a score or more of these miniature candy factories, service laboratories and candy kitchens, vying with each other apparently, in the com-

pleteness of their model equipment and the compactness and working efficiency of their layouts. Air conditioned chocolate dipping rooms, starch hot rooms and full complements of the usual candy-making machinery are to be found in many of these experimental factories. Substantial quantities of creditable candy are turned out daily for sample purposes. Often the model plant is operated in conjunction with the regular research and analytical laboratories of the supplier. Competent candy superintendents, chemists and demonstrators supervise the efficient and smooth running of these model factories handling directly the clients' inquiries which are addressed to them.

The valuable assistance which these "trouble" factories are rendering to the confectionery industry is all the more appreciated when, as in the majority of cases, the service work is not followed up by a persistent hounding of the client for business, nor limited strictly to the problems which involve the use of the consultant's materials.

(A series of articles dealing with the activities of these model plants and their noteworthy contributions to the industry's progress will appear shortly in **THE MANUFACTURING CONFECTIONER**.)

Riding to Ridicule

DRINTERS' INK, that efficient organ of the advertising industry, suggests that unless extreme caution is exercised by all parties, the warfare which is being waged against the sweet food industries by the American Tobacco Company is likely to produce results of more far-reaching effect and serious character than any of us realizes at present.

The conflict has passed the stage where it is of interest only to the participants, even though the word "participants" may

be stretched to include the employe populations of more than thirty industries. It remained for the newspapers to bring the problem to home and fireside and subject both aggressor and aggrieved to public ridicule. May not the public have *two quarters*, asks the New York World,—one for cigarettes and one for candy?

As if in answer to a veiled threat from the sweet food industries that a whispering campaign might be launched against *all* cigarettes, Lorillard graciously steps in the breach with:

THE MANUFACTURING CONFECTIONER

"Eat a chocolate,
Light an Old Gold,
--and enjoy both!"

Sensible advertising, that, but probably too late to prevent the powerful reaction sentiment from getting under way.

And to make confusion even worse confounded, we read the Congress Cigar Company's amazing declaration of the "cringing obedience" of the cigarette smoker to his ill-chosen god.

Sweets, cigars, cigarettes—each has its scientific and medical advocates to extol its respective virtues for a greater or less consideration, usually cash. Now if prominent and respected authorities will flatly contradict one another on a witness stand, where they are under oath, what will they not say in paid space? It is this increasing tendency of commercial advertisers to introduce conflicting professional testimony that has suddenly aroused the advertising press to the realization that this is no private fight between the candy and cigarette industries but the possible beginning of a series of guerrilla wars between competing industries which will eventually undermine public confidence in all advertising.

tising and thus destroy the very basis of American prosperity.

The issue to be fought out is whether we shall have *TRUTH* in advertising. Obviously, many of the statements contained in the current advertising are untruthful, or misleading. The public has been educated to expect the truth on package labels through the efficient supervision of the U. S. Department of Agriculture. Are they not entitled to the same protection from wily advertisers—or may the self-willed monarch of a half-billion dollar company tell them anything he pleases, with impunity?

The demand made of the Federal Radio Commission that it revoke the license of Station WEAF for putting on the air cigarette advertising alleged to be incompatible with the public interests, paves the way for similar action through the U. S. Departments of Commerce and Agriculture. It should not be necessary to enact new legislation to correct a condition so plainly opposed to public interest as this, for surely the present powers of these departments are broad enough to cover a situation of this character when its far-reaching effects upon business are made known.

What Can a Man Believe?

(Part of an article by Rain James in the Brooklyn Daily Eagle, Sunday, Dec. 2, 1928)

AND yet, as we have progressed physically and financially—yea, even artistically—we appear to have grown, surely, no less gullible. The old cycle is at work. Truth in advertising appears to have become a mere slogan once again, and the time is once more ripe for the beloved and departed department that years ago was so delightful a feature of the New York Tribune. It was, unless memory lies down on the job, conducted by Samuel Hopkins Adams. Further, and maybe we're wrong again, it was called the 'Ad-Visor,' and its function was separating the sheep from the goats, advertisingly, and tying a bell on the goats.

"Illicit advertisers quailed before Mr. Adams' every paragraph; makers of punk cough syrups rolled over and played dead; pill purveyors trembled in dark corners, and by reason of the glare of good publicity public gullibility waned to a marked degree. In those days a cigarette was something to smoke. It didn't give you vocal lessons, heal your tonsils, increase your nonchalance, cure your asthma, eliminate your goitre, cure your cold, prolong your life, protect your voice or prevent your cough. It didn't reduce your weight, assuage your nerves, supplant your breakfast or bolster up your fallen arches. You lighted a cigarette and your momentary troubles went up in smoke, and that was that. Better Business Bureaus acquired bunions from

chasing around after clothiers who invited you to walk up a flight and save ten; patent-medicine manufacturers who promised you immunity to everything from housemaid's knee to cancer, and rubber-tire builders whose product was found to be wholly devoid of that resilient substance.

"But in the cycle of progress, Mr. Adams' daily column has evidently been forgotten. Bankers, society women, jockeys, prize fighters, golf pros, screen actors and actresses, Channel swimmers and aviators have all been called to testify—for a fat fee—that a cigarette did it! You are asked to believe, too, that another raft of celebrities, blindfolded for the occasion, without hesitation, were able to identify a certain cigarette. Pictures illustrate the test, in the event that you should prove too gullible.

"According to a correspondent, who shall be nameless, there is the story of Johnny Farrell, the golf champ. Interviewed by a representative of an industry that is feeling keenly the more or less ethical campaign of a certain cigarette manufacturer, Mr. Farrell's trainer agreed that, despite Mr. Farrell's endorsement, Johnny had never smoked a cigarette in his life and that the advertisement didn't say he had. It merely said: 'I'll pass up the sweets, hand me a ——.' 'Infer if you wish,' writes our correspondent, 'that it went into the ashcan.'

(Continued on page 61)

1928—In Scientific Progress

Its Extent and Probable Benefit to the Confectionery Industry

BY H. S. PAINE

Carbohydrate Division, Bureau of Chemistry and Soils, Washington, D. C.

(This paper has been specially prepared for the
MANUFACTURING CONFECTIONER with the official sanction
of the United States Department of Agriculture.
—Editor.)

THE editor has asked me to write a brief review of scientific progress, especially in chemistry, during the last year, and to forecast its probable influence upon the candy industry. It may be well to take space at the beginning of this brief article to explain the limitations and difficulty in



Dr. H. S. Paine

forecasting the exact practical application of new contributions to fundamental knowledge. While it may be regarded as certain that the candy industry will profit in a material way from recent scientific progress, the exact form which this will take can be predicted in a general way. The sum total of human knowledge, regarded from the standpoint of its practical use and application, may be said to advance in two general ways: (1) By accidental direct observation, and (2) through the working out of basic principals which pave the way for subsequent practical applications. It has been well said that the theory of today is the practice of tomorrow.

A large proportion of existing knowledge has been obtained in the way first mentioned, but with increasing application of scientific methods more attention is being given, even by industrial concerns, to the advancement of knowledge by the second method. The method

of developing basic facts and principles first and following with practical applications has been so successfully applied even from the strictly commercial standpoint that large industrial research laboratories, such as that maintained by the General Electric Company, are giving increasing attention to this method of extending technical knowledge in their commercial field of operation. A deliberate attempt is made to discover basic facts, from which practical applications are made later.

Industrialization of Laboratory Processes

In connection with the foregoing remarks it is interesting to observe that radio, which is such an important commercial factor of our present day and which has been developed within the last twenty years, is based upon purely laboratory observations and experiments made years prior to this later development. Many readers are no doubt familiar with the fact that the varnish industry has been revolutionized within the last few years, owing to the development of quick-drying lacquers. This has been made possible by the production of suitable volatile solvents on an extensive commercial scale. The production of these volatile solvents is, in part, a practical development of scientific observations

on the growth of a peculiar bacillus which, as a result of its action upon starchy materials, produces acetone and butyl alcohol, together with other products in smaller proportion. These scientific observations were made prior to the World War. When the wood distillation industry was unable to furnish the quantity of acetone required for certain types of explosives, recourse was had to this bacteriological source of production. The laboratory process was industrialized and acetone was produced upon a large scale. Subsequent to the War, the products of fermentation other than acetone have assumed major importance. The production of wood alcohol by a synthetic process is another instance of the industrialization of laboratory experiments.

Coming now to the specific subject of the probable application and benefit to the candy industry of scientific progress during the past year, there may be mentioned first of all the subject of recent investigations on hygroscopicity, i.e., the tendency of substances to absorb moisture from the atmosphere. Everyone engaged in the candy industry will at once recognize the importance of increased knowledge on this subject. The absorption of moisture from the atmosphere under certain conditions of temperature and relative humidity is a property of many substances and is a matter of common observation. It is important to observe that this property varies considerably from one substance to another. Consequently, basic information upon the exact reasons for this variation may furnish the



THE MANUFACTURING CONFECTIONER

clue to important commercial applications, in which the tendency of certain types of candy to absorb moisture can at least be limited. While existing information upon the inherent causes of absorption of moisture, especially by certain materials, is not yet adequate to indicate means of practical control, yet advances have been made in this direction and it is pertinent to mention the subject at this point because of its great potential importance to the candy industry.

Why Does Candy Grow Stale?

It is perhaps needless to emphasize the fact that the equilibrium of moisture in candy with the moisture of the atmosphere lies at the very heart of the question of freshness of candy. Aside from

such factors as rancidity of fats, fermentation, etc., the aging of candy is primarily due to changes in moisture content. These changes may consist either in absorption of moisture from the atmosphere or in drying out (yielding of moisture to the atmosphere). Small amounts of impurities greatly affect the tendency of various substances to absorb moisture. Certain pure substances may have a relatively small tendency to absorb moisture, but when certain impurities are present this tendency is greatly magnified. More extensive information on this subject may have a valuable practical application. Whenever it becomes possible to control the moisture content of candy so as to prevent excessive changes from its condition when fresh, a long stride will have been

taken toward solving one of the most important technical problems in the industry.

The other half of the picture is that of correct packaging. Different degrees of closure are required for different types of candy of varying moisture content. In the case of some types of candy, the solution of the problem of packaging is technically simple and the problem is primarily one of cost. In the case of other types of candy, especially those of high moisture content, there is a serious technical problem involved, since in order to obtain the best results under all weather conditions the degree of closure of the package should be variable. So far, this ideal type of closure has not been attained, and it has only been possible to make an approximation of it.

Has Sweetness "Quality" —as Well as Intensity?

THE subject of the relative sweetness of different sugars and the most appropriate and accurate methods of measuring sweetness has been the subject of scientific investigations during the last few years. Important advances along this line were made during the past year. Sweetness is a physiological sensation, and hence is not subject to measurement by purely objective means. The usual method of measuring sweetness is by dilution. This consists essentially in preparing solutions of the sugars to be tested and in diluting each solution until the sensation of sweetness is barely perceptible. The sugar solution which can undergo the greatest dilution in this way is the sweetest. Thus, if one sugar in solution were diluted 1:1000 before sweetness became imperceptible and another sugar were diluted 1:2000, the second sugar would be rated as twice as sweet as the first. Measurements of sweetness by different methods have resulted in considerable discrepancy. Thus, various investigators have given values ranging from 103 to 173 for levulose, while in the case of dextrose (corn sugar) values ranging from 40 to 74 have been obtained. These figures are based upon a value of 100 for cane sugar (the chemical name for which is "sucrose").

More extensive investigation of the subject of sweetness shows that the relative degrees of sweetness of two sugars may not be the same in concentrated solution as in dilute solution. In eating candy, the sugar in the dissolved candy is in solution in the saliva of the mouth, and this solution is usually of rather high concentration. The presence of other substances may also modify the degree of sweetness, which, as has already been said, is purely physiological. Some substances, when mixed with sugar, accentuate sweetness, whereas other substances diminish it. There is also apparently a difference in what may be termed "quality" of sweetness, as well as in the intensity or degree of sweetness.

Structure vs. Oversweetening

All knowledge and information available in regard to sweetness and the factors which influence it are matters of the utmost importance to the candy industry. While candy is bought in response to a

craving for "something sweet," it is not in the interest of candy manufacturers to satiate this craving too quickly through the production of types of confections which are excessively sweet or palling to the taste. It must also be remembered that the important ingredient of candy—sugar—is used not only for its sweetness and food value, but also as what may be termed a structural material for the purpose of producing desired texture and consistency. Herein lies a difficulty. For instance, in producing fondant containing a high proportion of cane sugar (sucrose), a different consistency is obtained than in fondants which contain smaller proportions of cane sugar. The price paid for obtaining this improved consistency is a degree of sweetness which to some consumers may be excessive. A correct understanding of all factors which influence sweetness and the way in which sweetness can be modified is of great importance to the candy manufacturer from a sales standpoint, and all additions to the sum total of our knowledge on this point will undoubtedly be of great value.

Recent investigations have increased our knowledge of the solubility and saturation relations of the sugars. By this is meant the proportion of sugar which can be



dissolved in water and retained in solution without crystallizing out at any given temperature, and also the influence of one sugar upon the solubility of another sugar. Thus,

it is known that 33 parts of water will dissolve approximately 67 parts of cane sugar at ordinary temperature. If the sugar dextrose (corn sugar) is also dissolved with

the cane sugar, the proportion of cane sugar which will remain in solution is decreased, whereas the proportion of total sugars (cane sugar and dextrose) is increased.

Relation Between Solubility and Fondant Texture

SOME additions to our knowledge of this subject has been made comparatively recently. Such information is of very direct application and importance to the candy industry. This may be well illustrated in the case of fondant, which, as is well known, consists of a mixture of sirup and microscopic cane sugar crystals. In other words, fondant consists of a solid portion (small sugar crystals) and a liquid portion (sirup). Part of the total cane sugar used in the batch is present as microscopic crystals and part is present

dissolved in the sirup. If a straight sugar fondant is made and practically no inversion occurs during cooking of the batch, the fondant consists essentially of cane sugar and water. Every 33 parts of water in the fondant can hold 67 parts of cane sugar dissolved in it in the form of sirup, and the remaining cane sugar will be present as small crystals. However, if corn sirup is used in the formula it will modify the solubility of the cane sugar and consequently a different proportion of cane sugar will be present as small crystals. However, if

ent in solution in the sirup portion of the fondant. The proportion of sirup to microscopic sugar crystals is the most important factor in controlling the consistency of fondant. It is apparent from what has just been said that all information available regarding the solubility of the various sugars used in the batch has a vital and direct application in determining the possible variations in consistency which can be obtained in making candy from a given combination of sugars.

The Commercialization of New Sugars

INVESTIGATIONS have been continued during the past year on the sugar levulose in an endeavor to work out means of producing this sugar on a commercial scale. Whether or not this effort will prove successful remains to be determined. It is at least an interesting field of investigation. Levulose is somewhat sweeter than cane sugar, and varies from it in various physical and chemical properties. Just what the effect of the commercial availability of levulose on the candy industry would be in case this sugar were on the market at a reasonable price is at present a matter of conjecture. In this connection, it is well to recall the fact that invert sugar consists of equal parts of the two sugars—dextrose and levulose. Invert sugar is now used in considerable quantities in the candy industry and is also pro-

duced to some extent by the inversion of cane sugar during cooking of the batch. In making candy of certain types inversion is produced by adding cream of tartar (often referred to as a "doctor"). Hence, levulose is already a normal ingredient of many types of candy and is by no means a newcomer in the field so far as the candy industry is concerned. However, when present in invert sugar it is necessarily associated with an equal amount of dextrose, and it will be interesting to ascertain whether levulose in pure form would make possible new uses for this sugar which are at present not feasible because of its constant association with dextrose.

In pursuing the above topic it should be noted that while the sugar dextrose has appeared upon the

market during the last few years as "corn sugar" of a high degree of purity, it also is no stranger to the candy industry, since dextrose is a normal constituent of corn sirup and also of invert sugar sirup. However, in corn sirup it is associated with other constituents, such as dextrans. Dextrose (corn sugar) of a high degree of purity is now being used to some extent in the candy industry, and it will be interesting to see whether or not dextrose in this form (not associated with dextrans as when present in corn sirup) has opportunity for applications in the candy industry which are not possible with corn sirup. Some investigations along the line of direct application of pure dextrose to the production of candy of various types have been made during the past year.





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Processed the dependable Blanke-Baer way.

A Trial Shipment will convince you of their superiority.

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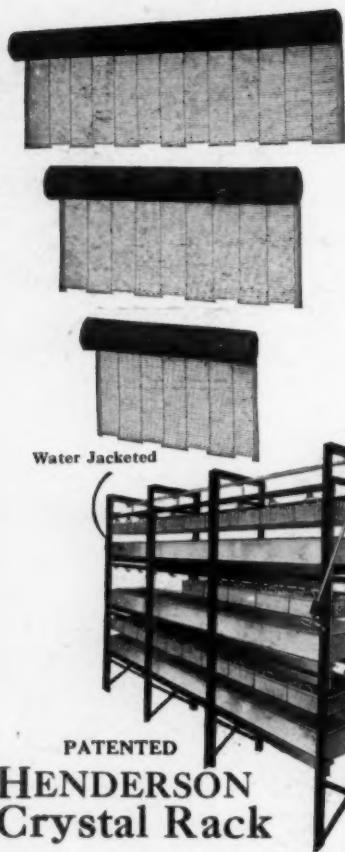
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DIPPING PINEAPPLE CUBES
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We can also supply our regular Ettersburg variety Dipping Strawberries packed in No. 12 cans to those of the trade who prefer them.

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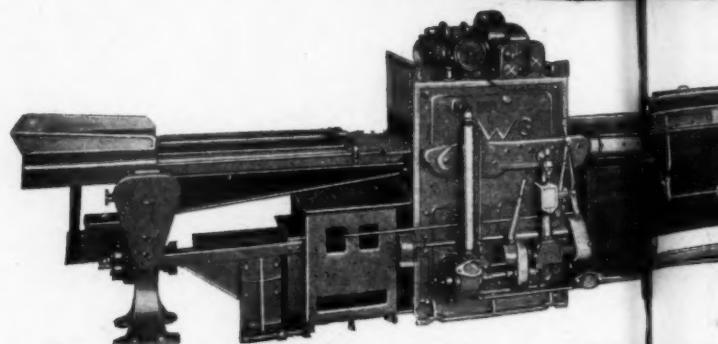


GREER Wire Belt

Greer Wire Belt is made in our own plant out of the very best wire. Standard belts in 16-in., 24-in., and 32-in. widths, fit any Coater or Enrober.

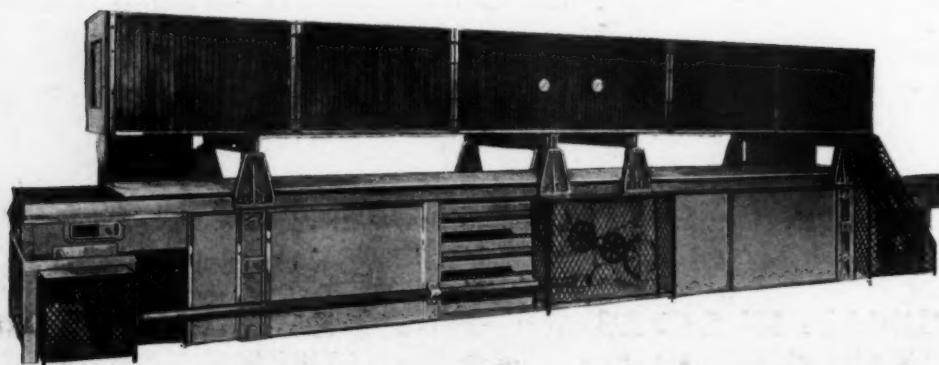
Any length of belt furnished as requested.

Wire belts are expensive. Why not buy the best?



GREER Automatic Plaque Tracer

Where floor space is at a premium the Greeratic Plaque Tracing machine is the ideal means of overcoming this difficulty. Goods are automatically transferred to the Cooling and Cooling machine operate continuously. This no interval machine is only 24 feet long yet is equivalent to a tunnel.



GREER Chocolate Cooling Machine

The Greer Chocolate Cooling Machine is recognized as the best and most modern means of cooling any solid moulded chocolate. The standard machine has a capacity of 2500 pounds per hour and yet occupies a space only $5\frac{1}{2}$ feet x 28 feet.

Moulds of any size can be used in this machine. Warming tunnels are supplied to warm and return empty moulds to moulding room.

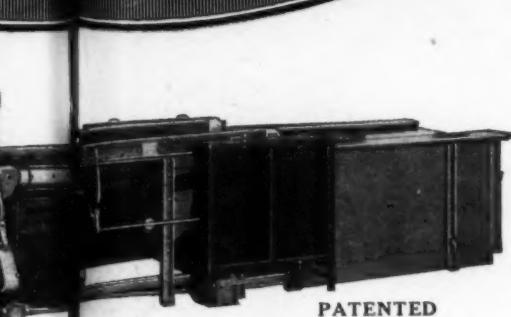
For
Bars and
Ten Pound
Cakes



GREER Quickling

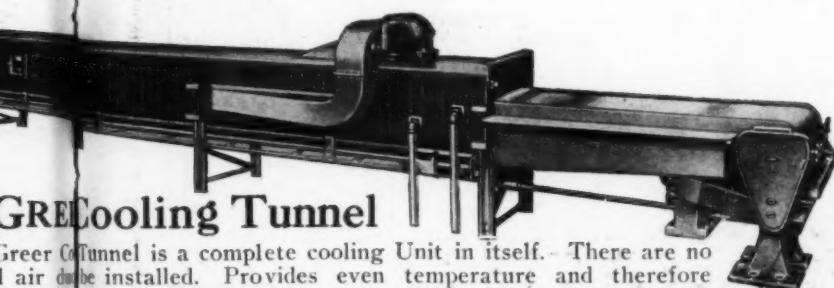
The surprising feature of this machine is its cooling capacity. It is a very efficient method of introducing air into the water. It uses water which is obtainable only on the Slabs.

J. W. GER
Manufacturers of Confections
119-137 Windsor



Tray Cooling Machine

The Greematic Plaque Transfer Cooling Machine. Goods are fed thru Coating machine to tray cooling machine. The Coating machine has no intermittent motion. Cooling equivalent tunnel 90 ft. long.



GRE Cooling Tunnel

Greer Tunnel is a complete cooling Unit in itself. There are no air ducts installed. Provides even temperature and therefore results. Tunnel is thoroughly insulated so can be used even in a warm climate. Patented conveyor belt insures much longer life for belts. Connected to Greer Coater or Enrober.

Quick Candy Slab
using features this Candy Cooling Slab has a capacity due to the unusually good method of circulating and draining it uses no water. These features are only on Slab.

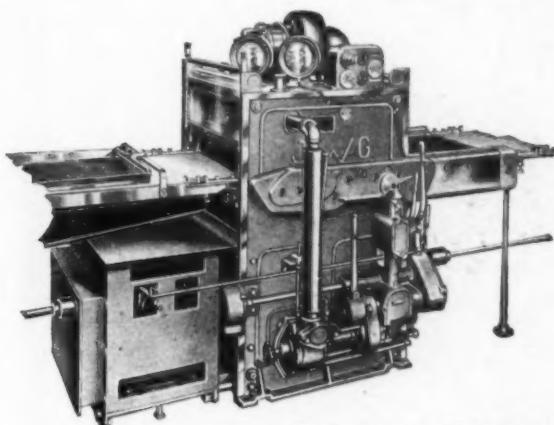
GER COMPANY
of Confectionery Machinery That Pays Dividends
CAMBRIDGE, MASS.

GREER Perfected Chocolate Melting Kettle

The Greer Perfected Melting Kettles are the latest, most sanitary and efficient type of Melter. The use of Greer Kettles insures a uniform coating.

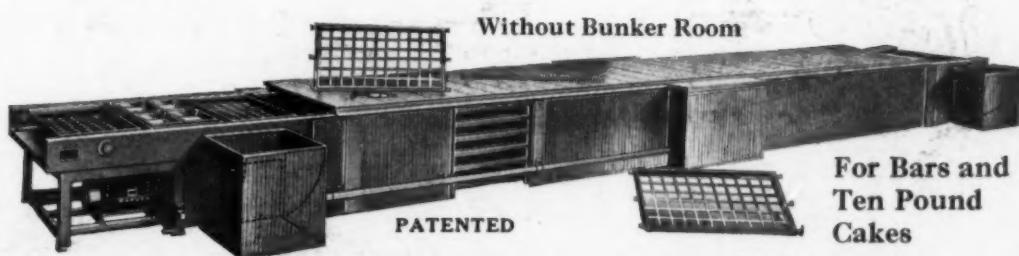
Outside surface is polished. No paint to crack off. Removable bearings throughout.

Made in 150, 300, 500, 1000 and 2000 pound sizes.



GREER Coater

The Greer Coater produces a remarkable amount of coated goods, and yet maintains the highest of quality. Simplicity has been achieved at last in a coating machine. In operation it is practically noiseless—a noiseless type of blower and drive being used. Variable Speed Transmission—NOT STEP GEARS—provides any desired speed.



GREER Chocolate Cooling Machine

This machine is the same as that illustrated on opposite page except for Bunker Room. With this type cold air is supplied from coils located in some other part of the plant.

Velvet

Cherries
that win
Favor

Velvet Cherries are well known for the advantages of their firmness, delicious flavor and appealing coloring.

Candy manufacturers who appreciate the value of quality always prefer and use Velvet Cherries.

Velvet
PINEAPPLE
CUBES

Select, juicy cubes of ripe pineapple . . . natural and an attractive assortment of colors and flavors . . . packed in cases of No. 10 cans.

PACKED IN BARRELS, HALF BARRELS, KEGS AND NUMBER TEN CANS FOR IMMEDIATE DELIVERY

THE C.M.PITT & SONS CO.,
KEY HIGHWAY BALTIMORE, MD.

Predetermining Sugar Behavior by Chemical Test

THE subject of "strong" and "weak" sugars has been the subject of considerable interest in the candy industry in recent years. This subject has been studied from a scientific standpoint during the last year or two, and new information regarding the essential causes of this variation in refined sugar has been obtained. These variations are due to small traces of non-sugar substances in the sugar. Refined sugar is probably the purest food product on the market. By this is meant that it consists almost exclusively of one chemical compound, i.e., "sucrose," or, in ordinary terms, "cane sugar" or "beet sugar." Yet even this exceptionally pure food commodity contains minute proportions of non-sugar substances originally de-

rived from cane or beet juice. Differences in the character and quantity of these non-sugar substances cause the variations in the behavior of sugar known as "strong" or "weak." When cane or beet sugar is dissolved in water and heated to a fairly high temperature, as in making hard candy, certain chemical reactions occur which result in inversion of a portion of the sugar. Sugars whose non-sugars cause the greatest degree of inversion are "weak" and those whose non-sugars cause the least are "strong" sugars. Much new information has been gained during the last year or two regarding the nature of these non-sugar substances which are present in such small amount in sugar and yet which have an important effect

on its behavior when heated. It is now possible, by appropriate tests, to discriminate accurately between "strong" and "weak" sugars, and to determine in advance the exact behaviour of the sugar when used in the batch.

Many new facts are discovered during the course of a year's advance in scientific knowledge, and, as explained in the beginning of this brief article, it is impossible to forecast with a high degree of accuracy just what will be the practical application of this new knowledge. The writer has endeavored to select certain topics which, in all probability, will be of greatest importance. In the limited space allotted some topics must necessarily have been omitted.

(Dr. Paine's next contribution to the MANUFACTURING CONFECTIONER will be "*Studies in the Solubilities and Sweetening Powers of Commercial Sugars in Relation to Human Satiety.*"—The Editor.)

In the Annual Chocolate Edition

*of The
Manufacturing Confectioner*

Mr. Ernest Fieux, Vice President of Runkel Brothers, discusses

"Practical Methods of Quality-testing, as Applied to Chocolate Coatings"

Mr. Robert Whympner, International Chocolate Authority, author of "Cocoa and Chocolate," urges coating manufacturers to

"Buy Cacao Beans by Brand"
and tells why.

These and a number of other unusual features make the January issue team with interest from cover to cover. Think now! Who else in your company should have a regular subscription to the Manufacturing Confectioner? Why not subscribe for them and make this a vital part of your Christmas gift to them—twelve constructive reminders of your good judgment and thoughtfulness.

A Factory Super becomes acquainted with the



FAMILY OF SUGARS

—and discovers how little he has exhausted their possibilities for novelty and profit in the candy batch

By NORMAN W. KEMPF
Staff Chemical Engineer

Another true story full of reader interest for the practical men of the industry

THE superintendent drew up a chair to the chemist's desk and dropped into it.

"It's raining tank cars outside, Bill, so I sent out for sandwiches and decided we'd eat our lunch together right here at your desk. You can open that sample can of fruit you've got over there and we can sharpen our teeth on some of Heinie's sandwiches and keep our feet dry."

"—and to what fortunate circumstance can I attribute this sudden generosity? It's not at all like you, Ed."

"Oh, nothing," Ed grinned, "nothing at all. I was just thinking how we could utilize your time to better advantage. The laboratory hasn't made any money lately, you know."

"I thought you'd make me earn this lunch somehow!" said the chemist with a twinkle. "What's the matter, has something gone wrong with the peach brandy?"

"Never mind trying to be funny and give me a little dope, will you?"

"Sure thing. What'll you have?"

"Well, I suppose I might as well give you a chance to get the horse-laughs over with at the start, but, er—tell me something about sugar."

Bill sat back in his swivel chair,

his face ready to break out into a roar.

"Naw, nix, Bill," said the super quickly. "Don't bother to pull that one about how long I've been in the candy business. I know it sounds funny, but I'm deadly in earnest. I used to think sugar was sugar, but the other day you told me there were something like a couple of dozen of them and all different. Tell me, what are they made of and what's different about them?"

"Ed, I thought my kid held the prize for asking questions that take an hour to answer, but you've got him beat."

"You said all those sugars were carbo-something or other—"

"Carbohydrates."

"Well, just what does that mean?"

"Ed, that's a question to ask anybody."

"Much less a chemist?"

"Much less a chemist. As far as I have been able to discover, the term 'carbohydrates' was originally applied to a class of compounds in which the ratio of hydrogen to oxygen is the same as in water, leading to the belief that these compounds must be 'hydrates of carbon.'"

"Well, are they?"

"No," said Bill, with emphasis, "decidedly not. The elements are present in the proper ratio, all

right, but the resulting compounds are anything but 'hydrates.' The group includes in addition to the sugars, dextrines, starches and the various forms of cellulose, all of which are highly complex compounds and not simple hydrates. There is a *family relationship*, however, existing between all of these compounds, for when broken down by hydrolysis they all resolve themselves into pretty much the same thing—the glucose molecule — at least, some mono-saccharose."

"What's that?"

"Excuses. I keep forgetting how innocent you really are. A saccharose is a sugar. There are two common types of sugars—mono-saccharoses or single sugars (such as corn sugar and fruit sugar) and di-saccharoses or compound sugars (such as cane or beet sugar) which are made up of two molecules of single sugars."

The superintendent halted an attack on a clumsy corned beef sandwich long enough to let these new associations of his old friends of the kettle sink in.

"All of the simple sugars," Bill continued, "have identically the same empirical constitution and formula— $C_6H_{12}O_6$ —which means that each molecule of the sugar contains six atoms of carbon, twelve atoms of hydrogen and six atoms of oxygen."

"Hold on there. I thought you told me they were all different!"

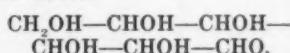
"They are alike in composition. It is only in properties that they are so different."

"That's over my head, Felix, old scout."

"Well, it won't be if you'll keep quiet a moment. The difference in the properties of these sugars is caused by different arrangements of the atoms within the molecule. For instance, the figure 6 may be written 3 plus 3, or 2 plus 2 plus 2. In either event the total is the same, only the arrangement of the component factors varies. Do you get that?"

"As simple as A B C."

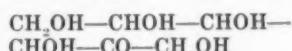
"All right, now just because I substitute a lot of letters for those numbers, don't let it confuse you." Bill drew a scratch pad toward him and wrote:



"Now, that," said he, "may be

THE MANUFACTURING CONFECTIONER

taken to be the arrangement of the atoms in dextrose, or ordinary corn sugar. On the other hand, fruit sugar or fructose, which has the same total number of carbon, hydrogen and oxygen atoms as corn sugar is believed to look like this:



"Now you notice that the sum total of carbon, hydrogen and oxygen is the same, and the arrangement of the atoms is the same up to the fifth link, where the = O group is hitched onto the fifth carbon instead of the sixth, making fructose a 'ketone,' whereas dextrose is an 'aldehyde.'"

"All I want to know," said Ed, cutting in a trifle impatiently, "is why it is that if all sugars are sweet and melt in water, yet when I try to make fondant out of corn sugar the same way I make it out of ordinary sugar, I ball up the works. Answer me that, O, oracle of Hoboken!"

"And who's wisecracking now?"

"Change signals. I thought you were Emil. Poor fellow, he lives in Hoboken, too."

Bill gnashed his teeth significantly but went on: "Dextrose is the simplest of the sugars, so let's start with that. It is found to some extent in the juices of almost all sweet fruits, particularly in grapes, to which it owes the name 'grape sugar.' It is the normal blood sugar of the human body.

Refined dextrose may be manufactured commercially from either corn or potato starch. In this country it is being produced in large quantities from corn starch, and is known as 'cerelose,' 'clintose,' etc. When starch is boiled with a dilute mineral acid it is split up or hydrolyzed in a manner similar to the process of human digestion. The first product of the hydrolysis is dextrin, a carbohydrate with a gummy character, which in turn breaks up into the double sugar maltose, and finally into the single sugar dextrose. This sugar represents 42% by weight of the solid matter in regular confectioners' corn syrup.

"Gosh!" the super interjected, "I never fully appreciated my corn starch custard before."

"And even dextrose itself occurs in two different forms," Bill went on thoughtfully, "for when it is crystallized from water at a tem-

perature above 136° F., it takes the anhydrous form and has a melting point of 295° F. But when it is crystallized from water at lower temperatures, 'dextrose hydrate' is formed with a melting point more than one hundred degrees lower—187° F. This is the form usually sold to confectioners."

"Is that another false alarm hydrate?"

"No, it is a real hydrate. The

ANNOUNCEMENT

A SERIES of short stories on "trouble shooting" will shortly appear in these pages. They are from the pen of our distinguished and versatile chemical engineer, Mr. N. W. Kempf, with the editors of this paper collaborating.

Written in the popular detective story style, these narratives will be of genuine scientific interest to the practical men of the candy industry. Trouble shooting as a means of solving the problems that come up daily in a candy factory has become so commonplace that we are apt to lose perspective and forget the ingenuity and one might say, clever detective work, which is expended by our factory or laboratory staffs in arriving at the ultimate obvious solution.

Mr. Kempf takes actual trouble shooting experiences and develops them in the fascinating and highly instructive Sherlock Holmes style.—The Editor.

crystals contain in addition to sugar one molecule of water for each molecule of dextrose."

"You mean to tell me that it is a 'wet' sugar?"

"No, don't jump to conclusions, Ed. The crystals are dry to the



touch, as you very well know. The water is combined *physically* with the sugar. And because the hydrate crystal is the more stable form of the two, the anhydrous or water-free crystal will greedily absorb water from its surroundings in order to form the hydrate. It is the failure of you candymakers to take this action into account that has led to so many pathetic and needless failures with dextrose candies. Unless definite measures are taken to control crystallization, candies which contain large proportions of dextrose will have a tendency to dry out and 'set' like concrete."

"The water dries out?"

"The water doesn't have to dry out, but is used up inside the candy in forming dry crystals of hydrate. Even if your initial crystallization is in this system, the subsequent growth of these crystals which is bound to occur as the candy ages results in the removal of water from the remaining syrup.

"You must have been looking in on some of my private experiments, Bill. Concrete was no name for what I got. Then I tried to doctor it both with cream of tartar and invertase—"

"And it didn't work."

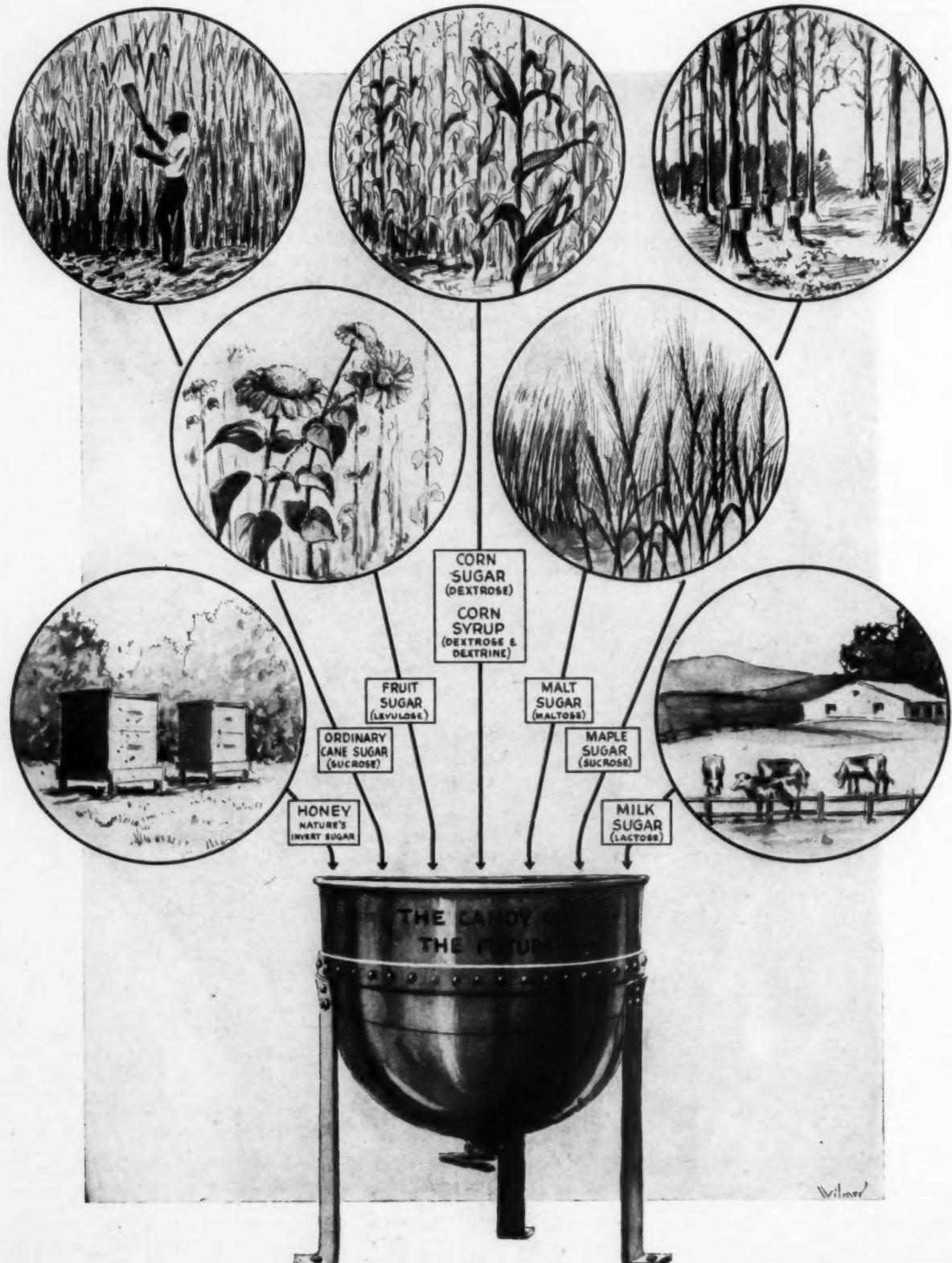
"How did you know?"

"That's an important point of difference between dextrose and cane sugar, Ed. Dilute acids and invertase have no action on the dextrose molecule which had already been broken down as much as it was ever going to be. It is impossible for you to 'doctor' it with this type of agent. In order to 'doctor' dextrose you must either use a small amount of some other sugar like cane sugar or fruit sugar, or else prevent the formation of large crystals by the introduction of dextrin or some other colloid. It is dextrin which prevents the dextrose in corn syrup from crystallizing out. Fruit sugar retards but does not altogether prevent this action in honey. Candymakers must learn to appreciate and utilize this property of dextrose before they can ever expect to get very far with it. The principle of the thing is simple enough. It's only that it is radically different from what they've become accustomed to."

"Well, maybe I'll try it again," remarked the superintendent thoughtfully. "No reason why I

The Family of Sugars—

from dairy, apiary, forest, garden and grain field
will come the sugars of tomorrow. The confectioner with foresight is studying their uses now.



THE MANUFACTURING CONFECTIONER

should let a little thing like that stump me."

"Yes, and some day, Ed, you're going to be using a whole flock of sugars—a special sugar for each purpose. Take levulose, for example. We hear it referred to under various names—fructose, fruit sugar—they all mean the same thing. It occurs naturally in most sweet fruits and is the other major component of honey and commercial invert sugars such as Nulomoline. Before very long they will be producing this sugar in commercial quantities from sunflowers—"

"Sunflowers?"

"Yes, the Jerusalem artichoke is a species of sunflower. The pure sugar can be prepared as anhydrous crystals, melting at 203° F. It is about 75% sweeter than cane sugar, however, a fact which indicates that it will find its chief use where maximum sweetness with minimum bulk is desired. Levulose crystals are extremely soluble in water. Also, they are hygroscopic and consequently will attract moisture from the air. When this sugar is available in commercial quantities and at a reasonable price, this property of moisture attraction and moisture retention will be very valuable to us. Fudges, and other uncoated candies, may be made so that they will never dry out or grow stale through lack of moisture. Because of its extreme sweetness it may even supplant sucrose for use in syrups."

"How would you go about 'doctoring' that one?"

"You'd have to use another sugar since like dextrose it is a simple sugar and therefore not affected by dilute acids. On the other hand, it has no hydrate to form and consequently will not 'set' the way dextrose does. Also, its general tendency is to hold water, where dextrose tends to dry out. When you have both of these sugars to play with you will be able to blend them to get any desired result or condition. The fact is, we have such a combination in invert sugar and in honey, only in these the proportions of each sugar are more or less predetermined and cannot be varied."

"I suppose by the time that happens I'll be a retired candymaker with a two-foot beard, living on the kids."

"On the contrary, Ed, if your wife doesn't decide to do away with

you prematurely, you may confidently look forward to using fruit sugar during the next ten years. The Department of Commerce has already produced a substantial tonnage of it on a semi-factory scale and when they get that far with it they don't mean maybe. But there's one sugar you probably won't have to worry about for a while, and that's galactose."

"The what?"

"Galactose, formed by the hydrolysis of milk sugar. It is similar to dextrose in composition and at present there is little prospect that it will ever be produced at a price which will enable it to compete with dextrose."

"One less to worry about. Have some of your peaches, Bill, and tell me where ordinary common sugar fits into the picture."

"That's it. You get me so busy talking that I don't even get time to enjoy my own swag. Well, I've already told you that sucrose is a compound sugar—a di-saccharose. It is found in sugar cane, sugar beets, and in maple sap. The molecule of sucrose is a combination of one molecule of dextrose with one of levulose, with a molecule of water removed. Not a physical mixture, but a chemical combination. This combination is easily broken up again in the presence of water, with which the molecule of sucrose combines to form equal amounts of dextrose and levulose, the process we know as 'inversion.'"

"What's inverted about it, anyway?"

"Ed, for a cheap candymaker, you do ask the darnedest—"

"You told me to ask questions, didn't you?"

"You win. It's because the mixture which is formed rotates the plane of polarized light in the opposite direction to sucrose. So sugar chemists call the hydrolysis an 'inversion' and the product of the inversion 'invert sugar.'"

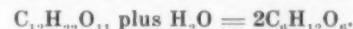
"Well, why doesn't sugar split up like that every time you add water to it?"

"It does, Ed, but only to a slight

extent. However, there are substances called 'catalysts' whose mere presence speeds up the hydrolysis. Hydrogen ion—you know, your old friend pH—and the enzyme invertase are the most familiar catalysts which exert this action. A fruit acid or cream of tartar acts as a 'doctor' merely by providing a supply of hydrogen ion.

"I guess our three hours for lunch are almost up," said the superintendent looking at his watch significantly. "Are there any more sugars you haven't catalogued yet?"

"Sure, there's maltose, which is also a di-saccharose. It is formed by the action on starch of another enzyme called diastase. It is only available commercially though, in an impure form, together with dextrose and dextrin. You use a little of it in your marshmallow formula—powdered malt extracts, such as Spramalt, etc., Maltose is very soluble in water, is quite sweet, and like sucrose can be doctorated by dilute acids. Only in this case the breakdown product is not invert sugar, but two molecules of our old friend dextrose, like this:



"Maltose and water gives dextrose. Now you may begin to get what I mean when I say that there is a family relationship between the various sugars. The most useful property of maltose is its ability to attract moisture from the air and hold it."

"For this reason, like levulose, it should be valuable in uncoated candies in order to prevent them from drying out. Commercial malt powders have a distinctive malt flavor which is probably due to the impurities, however, and not to the sugar itself."

"That's darned interesting, Bill. Say, before we end this party, how about milk sugar? Is that any different from the rest?"

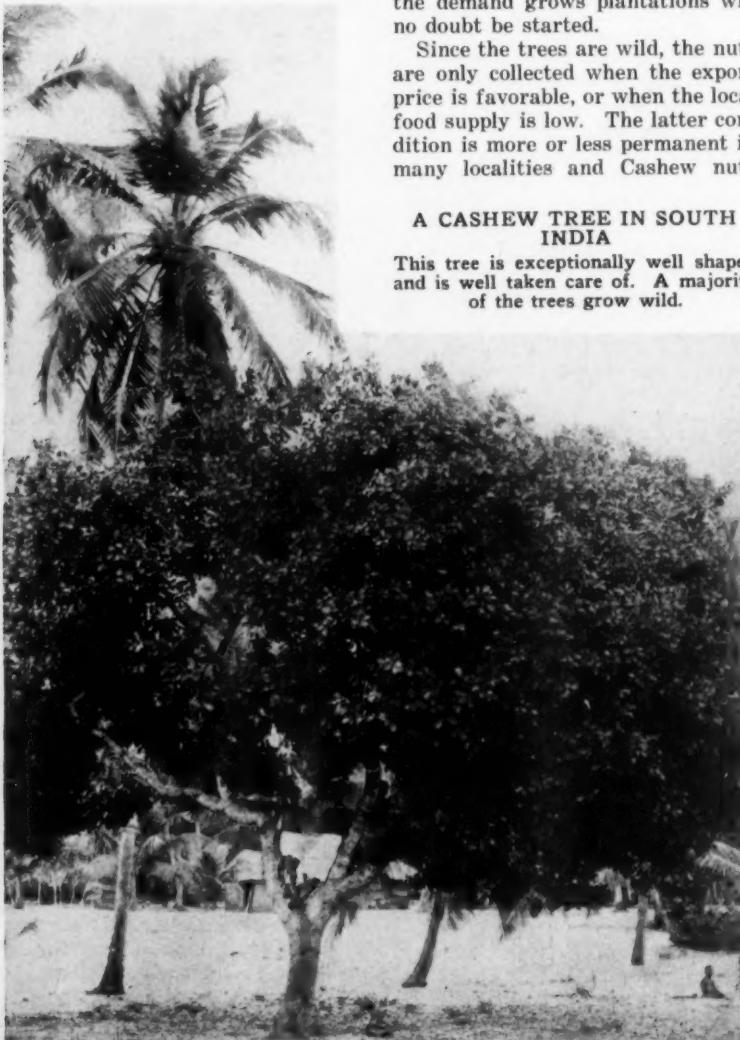
"It is different in this respect—that whereas most of the other sugars are found extensively throughout the vegetable kingdom, milk sugar occurs only in the milk of animals. The commercial product is prepared as a by-product of the milk industry. It forms a hydrate whose crystals contain one molecule of water of crystallization. Lactose hydrate is less soluble in water than cane sugar and is not

(Continued on page 56)



FIVE years ago there was no Cashew nut business. This year about four million pounds of blanched Cashew nuts will be imported and consumed in the United States. This makes quite a lusty infant industry. The writer has nursed this infant through its business measles and mumps, as well as tooth cutting, and recently returned from visiting the child's parents in India. Consequently he feels qualified to answer some of the questions which have been asked by users and prospective users of Cashew nuts in the candy business.

The history of the Cashew Nut is quite interesting. It is quite usual for valuable plants to migrate



A CASHEW TREE IN SOUTH INDIA

This tree is exceptionally well shaped and is well taken care of. A majority of the trees grow wild.

The Cashew Has Come to Stay

Preservation in inert gases ends long struggle against infestation

BY THOMAS M. RECTOR

Author of "Scientific Preservation of Food" and Inventor of the now Widely Used VITAPACK PROCESS

from old countries to new ones, but the Cashew tree was carried from one of the newest localities, South America, to one of the oldest, India, by Portuguese missionaries in the fifteenth century. The tree now grows wild along the Malabar coast of India and also in various localities north and south of Madras. There are at present no bearing plantations, but of course as the demand grows plantations will no doubt be started.

Since the trees are wild, the nuts are only collected when the export price is favorable, or when the local food supply is low. The latter condition is more or less permanent in many localities and Cashew nuts

are quite a staple item on the native bill of fare. The native goods sold in the bazaars, however, are poorly blanched, buggy and scorched by unskilled roasting, and would not be considered edible by our discriminating buying public.

For years the native traders as well as some foreign export houses, in times of high nut prices, collected the merchandise of the bazaars and shipped it to Marseilles, Hamburg, and other European ports. At times shipments came to the United States, but the risk of insect infestation was so great that the business almost expired. The restrictions of the United States Department of Agriculture finally killed it altogether, and only an occasional shipment came in from the West Indies or India.

Vitapack Process Foreshadows Cashew Development

In 1922 the writer, in the course of developing the process of preserving foods in inert gases known as the Vitapack process, became interested in the efforts of a Hindu merchant to introduce Cashew nuts into this country again, and as the result of considerable experimental work the first Vitapack Cashews arrived during the year 1923. By maintaining American standards of grading and cleanliness in the Indian factories, quality was improved to such an extent that the demand for Cashews has doubled every year since. There is no doubt that this improvement in demand will continue as long as the quality of imports is not allowed to lapse.

The rapid growth of the Cashew business has resulted in great local excitement in India, and many merchants with no previous experience or knowledge have rushed Cashews to the New York market, consigned to brokers. This surplus of merchandise of inferior quality caused a lowering of market prices to below cost of production. While the

THE MANUFACTURING CONFECTIONER

lesson was very expensive to Indian shippers, the aftermath will probably give an improved tone to the business.

The preparation of Cashew nuts for shipment involves all the difficulties of both a manufacturing and shipping business. Lack of knowledge and efficiency in either branch is sure to result in inferior quality.

The raw material entering the Cashew shelling factory is the Cashew seed. This seed grows on a tree resembling to some extent an orange tree. The seeds grow attached to the end of a fruit about the shape and size of a large pear. The trees are not very prolific and collection would not be possible but for the miserably poor compensation received by the Indian farmer.

The nuts mature during April, May and June, but only in the well organized plants are these nuts available until after the rainy season. This means that many of the Cashews marketed in the Fall of 1928 were harvested in the Spring of 1927. When the new crop nuts are handled in the modern way, however, the bulk of them are shelled during the Spring and Summer, and arrive in the Fall, ready for the heavy consuming season.

Before the nuts can be shelled they must be roasted to make the shells brittle. This is a very delicate process carried on by skilled labor, and must be carefully done to avoid scorching the kernels.

Shelling is done by hand. Peeling, or removal of the red skin around the kernel, is also done by hand. Before peeling the nuts must be dried. This was formerly done in the sun, but modern plants have mechanical dryers.

After peeling, of course, the nuts must be graded to remove defective kernels and the broken separated from the whole. Since the whole nuts sell for about twice as much as the broken, care is taken to break as few nuts as possible.

The standard packing for Cashew nuts is now two 25-pound square tins to the case. Formerly Cashews were packed in 112 or 224-pound cases, but this packing was abandoned on account of excessive breakage of the nuts and insect infestation.

The Cashew nut made its first appeal to the public as a salted nut. The nut salters were quick to sense

the popularity of Cashew nuts and were able to sell salted Cashews on a very profitable basis compared with almonds.

Confectioners Finding New Uses for Cashews

A few confectioners were quick to see the possibilities of the broken nuts as a substitute for the more expensive filberts, walnut and almond pieces. Many held back, however, because of the uncertainty of the supply. The low prices and plentiful supply of this year appear to have broken down the last resistance, however, and now broken Cashews are selling readily to confectioners of all degrees.

Confectioners are rapidly finding new uses for Cashew nuts, not only in combination with other nuts, but alone. Several manufacturers are now putting out Cashew brittle, and the sale of this article is growing daily. Others have found that whole Cashews, as well as broken nuts, can be chocolate coated to great advantage. Clusters, bars, and nuts individually coated have all been well received by the public. For chocolate work, whole nuts slightly over-roasted in the shelling process are available at consid-



A South Indian scene, near the cashew-growing country. Toddy palms in the foreground.

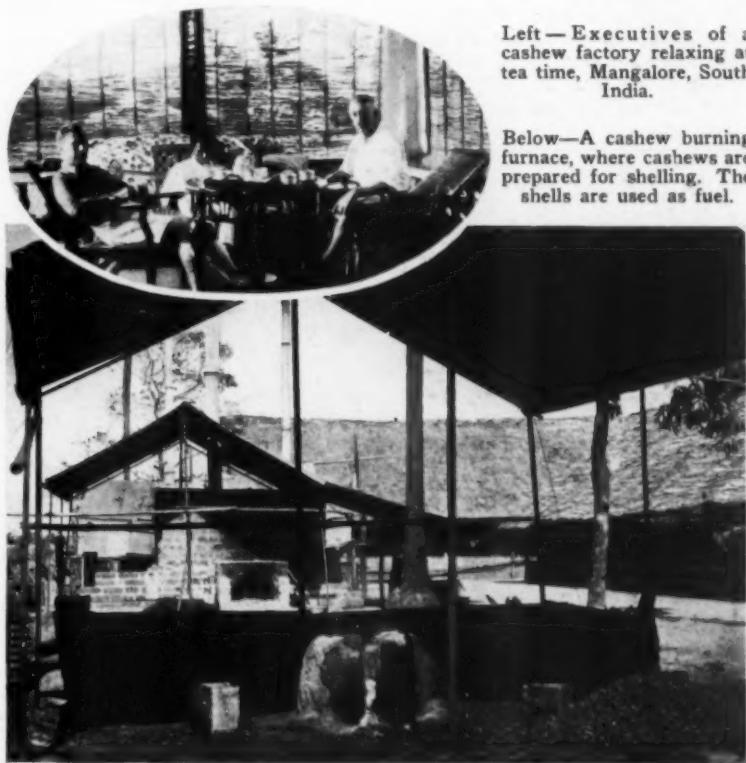
erable price concessions from the cost of white nuts.

Bakers are finding that Cashews blend excellently in all fruit and nut cakes, and bakers' supply houses are making sliced Cashews for topping instead of the more expensive almonds. Cashews are also being used extensively in nut bread.

Another promising use for Ca-

Left—Executives of a cashew factory relaxing at tea time, Mangalore, South India.

Below—A cashew burning furnace, where cashews are prepared for shelling. The shells are used as fuel.



THE CASHEW HAS COME TO STAY

Right—A scene in Ceylon. Ceylon is as wet and verdant as South India is dry and desolate before the Monsoon.

Below—Cashew grading and inspection at Goa, Portuguese, India.



shews is in the preparation of paste on the order of almond paste. Sound Cashew pieces make a paste which in every respect but flavor is indistinguishable from almond paste. The possibility of blending almonds and Cashews in paste is of course apparent.

Now that confectioners and bakers can be assured of an ample supply of Cashews of suitable quality, they are naturally interested in the trend of prices. It will take several years to develop the con-

sumption of Cashews to anywhere near the volume of the almond or filbert market. Until a larger volume is reached the price of broken Cashews will be governed largely by the price of filberts and will undoubtedly take a place about two to four cents lower. As the merits of

Cashew pieces become better known this difference will no doubt lessen.

In the Cashew the American public has a new food delicacy which is a welcome addition to the joy of living.

Confectioners and bakers will find it to their profit to help fill the demand for this new oriental treat.



Entrance to the world's largest cashew-shelling factory. This plant employs about 1,500 workers.

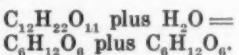
A Family of Sugars

(Continued from page 53)

as sweet. It is used in the manufacture of color pastes for hard candy work. It can be safely used for this purpose because it crystallizes in a different system and will not act as a 'seed' to start the graining of sucrose crystals. Various types of candy are now being made from it, principally by the Rosemary Candy Company, which is a subsidiary of Dry Milk Company."

"I'm glad I don't have that problem to handle. I suppose it is handled differently from all the rest."

"Not so different as you might think, Ed, because lactose is a disaccharose, and like ordinary sugar can be doctored by the use of a fruit acid. You get a reaction like this:



Lactose and water gives dextrose and galactose."

"Say, you can't keep that dextrose down, can you? Even get it when you bust up milk sugar. Sure is some big family, all right. Reminds me of my wife's relations."

"Yes, and we've only scratched the surface, Ed. Down at the carbohydrate laboratory of the Bureau of Chemistry at Washington I saw a cabinet containing samples of some of the sugars they had prepared. There were hundreds of them. Of course, a lot of them are just laboratory curiosities and very rare just now, but one of these fine days some unknown source may come to light, and presto! one of these sugars will be trotted out of the archives and made to grace our table or furnish fuel for our airships. Science is like that."

(We shall be glad to entertain suggestions from our readers for new topics for treatment in this "Bill and Ed" series. Mr. Kempf's next subject will be "Catalysis." If you enjoy this method of presenting facts pertaining to the chemistry of candy-making, we will be glad to have you write and tell us so.—Editor.)

John Sheffman with Huhn Mfg. Co.

John Sheffman, formerly with Candy & Chocolate Equipment Co., is now with Huhn Mfg. Co., representing territory east of Ohio, New England, Atlantic and Southern states.

Answers to November Questions



1. What new confectionery flavor seems destined to provide fresh impetus to reforestation programs in Northeastern United States?

Ans.: The new genuine maple.

2. Which basic cocoas are being encouraged for domestic consumption on the ground that they are the only cocoas in the world produced by an all-American company?

Ans.: Costa Rica and Panama.

3. What confectionery raw material is an important source of lysin?

Ans.: Peanuts.

4. What principle of modern candy factory operation has recently been made available for private homes?

Ans.: Air-conditioning, which is being introduced by Carrier-Lyle Co., a subsidiary of Carrier Engineering Corporation.

5. How has the disadvantage of lessened bulk and consequent wastage been overcome in the use of ethyl vanillin in chocolate coatings?

Ans.: By employing as a flavor vehicle a portion of the cocoa butter which would normally be added to the chocolate liquor during the course of manufacture. Ethyl vanillin is soluble to a limited extent in cocoa butter. The measuring out of the flavor necessary for each batch then becomes a matter of pounds instead of ounces and the use of foreign solvents or carriers is thereby avoided.

6. What is meant by "enfleurage" in connection with confectionery flavors?

Ans.: Use is made of the propensity of fats and oils for absorbing odors. Layers of flavoring substances such as rose petals, violets, etc., are compressed between alternate layers of fat. The fat takes up the flavor and is subsequently subjected to various processes of refining and purification.

7. What American-grown product is referred to as "desert gold"?

Ans.: Fresh dates, especially of the Deglet Noor variety.

8. How do you explain the ap-

Ask Me

There's fun and wisdom to be had in answering the M. C.'s ten monthly questions.

What's your score?

1. Which of the Commercial Confectionery sugars is the normal blood sugar of the human body?

2. How do inert gases serve to protect nutmeats from deterioration?

3. What are the relative merits of candy vs. tobacco for soothing the nerves?

4. What is it that has been called "the moth balls of the fig industry"?

5. What factors determine the shelf-life of marshmallow?

6. How does candy prevent fatigue?

7. Name an important edible nut whose shell oil possesses possibilities as a cure for leprosy.

8. How does barometric pressure figure in the manufacture of marshmallows?

9. What book recently published, honestly and effectively refutes the attacks upon candy which are contained in Dr. Lieb's "Eat, Drink and Be Healthy," (the entire issue of which is reported to have been purchased by the American Tobacco Company for distribution in connection with their "Lucky Strike" campaign)?

10. Which of our major confectionery nutmeats is almost exclusively an American product?

parent paradox that a pound of the new genuine maple flavor having a flavoring strength equal to at least 60 pounds of maple sugar, can be produced from that same maple sugar at less than 30 times the price of maple sugar at point of origin?

Ans.: Maple sap possesses very little of the characteristic flavor

which we know as maple. The subsequent process of boiling and concentrating brings out the flavor of maple, probably as the result of the breakdown of more complex flavorless substances contained in the sap. Recent scientific investigations indicate that this process of creating maple flavor where none existed before, continues with each subsequent concentration or extraction.

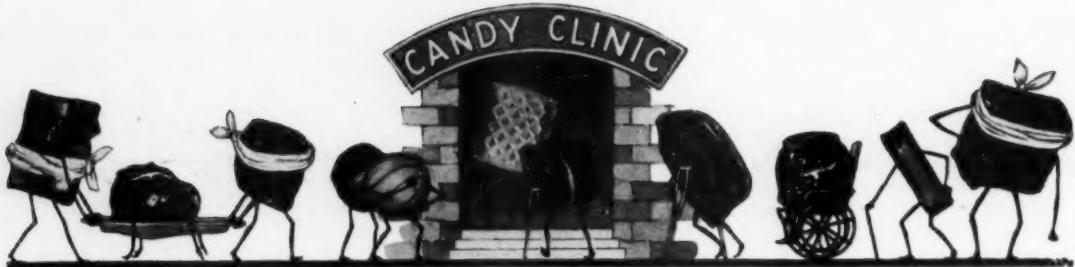
9. What popular confectionery raw material grows under ground?

Ans.: The peanut.

10. In adapting formulas for one locality to use in another locality, what important factor is most frequently overlooked?

Ans.: Difference in barometric pressure between the points of production or the points of production and use.





The Candy Clinic is conducted by one of the most experienced superintendents in the candy industry. Each month he picks up at random a number of samples of representative candies. This month it is 5c bar goods; next month it will be holiday assorted chocolates.* Each sample represents a bona-fide purchase in the retail market, so that any one of these samples may be yours.

This series of frank criticisms on well-known, branded candies, together with the practical "prescriptions" of our clinical expert, are exclusive features of the M. C.

A "Muckle" for a Nickle

Sample OH—No. 12

Milk Chocolate Peanut Sponge Bar, 2 oz. 5c

(Purchased in a retail store in New York City.)

Packing: Wrapper of glassine with white, red and blue printing.

Coating: Milk Chocolate; good color and good flavor.

Center: Peanut Butter Sponge dipped in caramel and rolled in peanuts.

Sponge: Excellent.

Caramel: Entirely too hard.

Peanuts: Well roasted and of good flavor.

Dipping: Good.

Remarks: This is a first-rate bar for a nickel and is deservedly enjoying a widespread sale.

Sample MS—No. 12¹

Fruit Jelly Bar, 1½ oz. 5c

(Purchased at a news stand in New York City.)

Packing: Cellophane wrapper with black printing.

Composition: Made up of Jap Jelly. Three layers, top and bottom layers, Orange, and center layer, clear Jap Jelly. Sugar sanded.

Flavor: The Orange was rancid. The center layer had no flavor of any kind.

Jelly: Excellent. Not tough and very moist.

Remarks: Were a good Orange flavor used, this would be a good bar for the price.

Sample CR—No. 12¹

Milk Chocolate Honey Bar, 2 oz. 5c

(Purchased at a news stand.)

Packing: White glassine wrapper. Blue and red printing.

Coating: Milk Chocolate: Excellent color, but no flavor and applied very thin.

Center: A nougat caramel paste with very few almonds.

Dipping: Fair.

Flavor: Honey, very good.

Remarks: This is a very good eating bar, but the chocolate coating was entirely too thin.

Sample SJ—No. 12

Honey Nougat Bar, 1½ oz. 5c

(Purchased in a retail store in New York City.)

Packing: Glassine wrap. White, blue and red printing.

Composition: Chewey nougat and caramel paste with walnuts, almonds and peanuts mixed in.

Nougat: Chewed very well. Color good.

Flavor: Hardly any.

Nuts: Taste O. K.

Remarks: This would make an excellent bar provided more honey flavor or a honey of stronger character were used in its manufacture.

Sample CR—No. 12²

Milk Chocolate Caramel Peanut Bar, 2 oz. 5c

(Purchased at a news stand in New York City.)

Packing: White wrapper with red printing. Very cheap looking.

Coating: Milk chocolate.

Color: Fair, too light.

Flavor: Very poor; tasted old.

Center: Short caramel dipped in caramel and rolled in peanuts.

Caramel: Had a strong taste and was too hard.

Peanuts: Spanish, roasted well and of good taste.

Dipping: Fair.

Remarks: This bar not up to standard. Your Manufacturing Department needs "jacking up."

Sample PL—12

Peanut Bar, 1½ oz. 5c

(Purchased in a retail store in New York City.)

Packing: Cellophane wrapper. Gold seal. Chipboard bottom. Size 4½" x 1¾".

Peanuts: Mostly all splits, but well roasted.

This bar also had a few almonds and a little coconut mixed in with the peanuts.

Candy part: Tasted as though dry sugar had been used.

Taste: As though bar were old or the peanuts not good when the bar was made.

*Originally scheduled for December issue but held over because of lateness of the appearance of these goods on the retail market.

THE MANUFACTURING CONFECTIONER

A Survey of Some of Bar Land's "Best Sellers" Reveals Striking Contrasts in Materials and Workmanship.



Typical of the 5c Specialties in This Month's Clinic—is yours among them?



THE CANDY CLINIC

Remarks: This is an excellent number when made right, but this specimen was certainly not up to standard.

Sample CR—12²
Milk Chocolate Peanut Marshmallow Bar, 2 oz. 5c

(Purchased in a retail store in New York City.)

Packing: Printed wrapper; very gaudy and cheap looking. Yellow edges, with red and yellow printing, which is entirely too large.

Condition of goods: Excellent.

Coating: A good quality of milk chocolate.

Color and gloss: Good.

Taste: Good.

Center: Marshmallow, very good.

Nuts: Spanish peanuts used in coating, roasted well and had good flavor.

Dipping: Well done.

Remarks: The raw materials used in the make-up of this bar were of exceptionally fine quality; it deserves a better looking wrap, however.

Sample EU—12
Chocolate Peanut Butter Fudge Bar, 2 oz. 5c

(Purchased at a news stand in New York City.)

Packing: Red wrapper, with blue printing. Good looking wrap for this class of goods.

Coating: Milk chocolate of good quality.

Color: A little too light.

Flavor: Excellent.

Center: Peanut butter fudge dipped in caramel and covered with nuts.

Flavor: Very good.

Dipping: Well done.

Remarks: This piece of candy could be made better eating if a little more coating were used.

Sample ML—12¹
Chocolate Marshmallow Bar, 1 oz. 5c

(Purchased at a news stand in New York City.)

Packing: Silver foil wrapper with blue printing. Very attractive.

Coating: Sweet chocolate.

Color: Good.

Taste: Only fair.

Center: Marshmallow, tough and tasteless.

Dipping: Excellent.

Remarks: For the price at which this bar sells, a far better bar could be made, both in size and quality.

Sample ML—12²
Chocolate Cocoanut Cream Bar, 1½ oz. 5c

(Purchased in a retail store in New York City.)

Packing: Silver foil with small blue printing. Very attractive looking.

Coating: Bittersweet chocolate.

Color: Dark.

THE CANDY CLINIC
20-40 EAST 45TH STREET
NEW YORK CITY

R

More bars are still-born as a result of economizing on coating than from other half a dozen causes. Use enough, good coating.

H.W.D.
SUPERINTENDENT

Coating: Bittersweet. Very badly grayed.

Flavor: Fair.

Color: Dark, but piece looked old, as coating was gray.

Center: Cocoanut fondant. Cocoanut good. Fondant short and dry.

Dipping: Very good.

Remarks: This bar is not up to standard. A short time ago I examined a specimen of this same bar and it was very good.

Sample MS—12²

Chocolate Covered Peppermint Cream, 1½ oz. 5c

(Purchased in a retail store in New York City.)

Packing: Foil wrap, blue printing. Fairly attractive looking.

Condition of candy: Good.

Coating: Bittersweet.

Color: Good.

Flavor: Fair.

Center: Peppermint cream.

Fondant: A little too short and too dry.

Flavor: Fair; not very good. Peppermint oil used.

Dipping: Fair.

Remarks: The bottom of this piece of candy had scraps of paper mixed with the chocolate, which spoiled the appearance and made it look uninviting.

Sample HF—12

Toasted Marshmallows, 6 pcs. 5c

(Purchased at a news stand in New York City.)

Packing: White cellophane, small seal with name. Neat and attractive.

Cocoanut: Toasted to a good color and had a good, fresh taste.

Marshmallow: Very good. Light and tender and had a good flavor.

Remarks: This is a different and attractive 5c seller. It should prove popular.

Sample RP—12

Chocolate Marshmallow Caramel Bar, 1½ oz. 5c

(Purchased in a retail store in New York City.)

Packing: White glassine, blue printing. This wrapper has no "pep" to it. A new wrap is needed to put this bar in a class with other bars.

Coating: Sweet chocolate, somewhat sandy.

Taste: Fair.

Color: Very dark.

Center: Marshmallow tough and flavorless.

Caramel: Tough and too dark. Had started to "run."

Dipping: Good.

Remarks: Put out by an old familiar house, this bar is hardly up to standard. It needs a radical change in both raw materials and workmanship.

Are There Signs of Returning Quality-Consciousness Among Bar Manufacturers

BY ERIC LEHMANN

IT is common knowledge that the bar goods business has lost considerable ground during the past few years. In my opinion what this class of business needs most is a new type of bar or a number of new types which could be widely advertised in order to stimulate public interest in bars again. A number of the leading bars on the market today are not up to standard; but to put it more baldly, they are not being made of as good raw materials as they were when they were first put out on the market. In many cases the chocolate coating is not nearly as good as it ought to be to attract repeat sales and where a fair quality of coating is used, economic considerations seem to dictate that it be put on paper-thin. To make a bad matter worse, the work is often carelessly done.

The conventional centers of marshmallow, caramel and nougat are in a great many cases crudely made, lacking taste, etc. Where the same bar is made day in and day out in the same factory, there is no reason why this class of candy should not be uniformly well done. Some of the marshmallow bars I

examined were distinctly tough and devoid of flavor. Marshmallow is surely an inexpensive enough center to permit a little extra care in selection of materials and workmanship so that the product the customer gets will stand up and not be tough.

A very important thing is flavor, which a large number of bars lack. Some of the cream bars examined were tough, dry and tasteless. A very good fondant can be made that will not cost any more than the one made that is "loaded" up to the limit with corn syrup. At the prices prevailing for corn syrup and sugar today, the saving to be made by using an over-supply of corn syrup in fondant is very small.

Where caramel was used in these bars for dipping, it was of poor quality. There isn't anything in the candy industry today that is more overdone than caramel paste. A



What Can a Man Believe?

(Continued from page 41)

"Personally, we have come to the point where we refuse to accept everything the clever advertising agents hand us, because it appears that of late they aren't nearly clever enough. Several years ago we made an address before an advertising association in Cleveland. A great 'Behaviorist' spoke on the same program. Speaking of various cigarette brands and seeming infatuations for those brands, this Behaviorist told of testing eleven men, each of whom was 'addicted' to a certain brand to which he had been loyal for years. Each testee was given ten different brands

of cigarettes to smoke, and NOT ONE could distinguish his pet brand. Most interesting in this era of blindfold tests, and the like is that the afore-mentioned Behaviorist is directly connected with the company for which Celebrities are at this present writing guessing the correct cigarette on the third try. What we started out to say is that crying 'Wolf!' in terms that must needs make even the most gullible moron skeptical can't help advertising or the future of advertising. To paraphrase Bruce Barton—'What Can a Man Believe?' "

IAM often asked my opinion of different types of chocolate, and I have to admit a great difficulty in giving a fair answer unless I know the purpose to which they are to be put. But there are certain fundamental points about all forms of chocolate on which no one should go wrong un-



ROBERT WHYMPER

*International Chocolate Expert,
Author of "Cocoa & Chocolate"*

Deplores Scarcity of

CHOCOLATAU

Part 2: "CHATS ON CHOCOLATE"

(Editor's Note—Mr. WHYMPER'S articles on Chocolate
(will appear exclusively in the Manufacturing Confectioner)

less, as I quite frequently see, the persons sampling the chocolate do so with a cigar or cigarette scarcely removed from their lips. Smokers, of whom I am one, should never pass an opinion on chocolate within an hour of smoking. Mouthwashes, except good honest beer or a mild astringent, are usually unsatisfactory owing to a predominating aftertaste, but it is a wise practice, if you must smoke, to chew a small piece of pure wood carbon, washed down with water, thirty minutes or so before any sampling is done. Most smokers prefer to risk the judgment of their smoky palates rather than submit to such drastic treatment.

It will be seen from these preliminary remarks that the one fundamental that I consider of most importance is the aroma, perfume, or flavour as distinct from taste which includes acidity, astringency and bitterness and which is the second most important. The aroma, of course, is subtle and requires considerable practice to identify as characteristic of any particular variety of cacao bean. Yet, each variety

of cacao possesses an inherent characteristic perfume which the expert can detect.

Chocolate No Better Than Its Beans

It is further a fact, often overlooked by chocolate manufacturers, that the Buyer for a Company may purchase never so wisely, the Manager may blend his cacao with every skill, the roaster may roast to perfection, and the whole process may be carried out with scientific precision, yet no one can get more aroma out of the cacao in hand than that with which Nature endowed it and the producer encouraged. Admittedly every perfection of process in the manufacture of cocoa and chocolate gets better results than any imperfection, but different cacahuas possess different characteristic aromatic properties which, however secured by the producer during growing, fermenting and drying, were naturally present and remain only latent until developed by heat and freed by disintegration of the cells containing them in subsequent operations of roasting, grinding, conching, etc., in the chocolate factory.

In judging chocolates it is neces-

Cacao beans of varying quality—good, bad and indifferent—are used in coatings. Only the

ATAU NATUREL"

—and sees the chocolate manufacturer's biggest problem to conserve the natural flavor with which Nature endowed it

sary, therefore, to go a long way further back than most manufacturers and buyers do, and to know something of the cacao types and their method of preparation for the market, since it is these two factors that are of prime importance in determining aroma. And it is owing, generally, to ignorance of these matters on the part of those seeking information that I refuse to express an opinion on the vanilla confections that pass today under the name of "chocolate," since the natural cacao aroma is usually completely smothered by the overpowering perfume of vanillin (from the pod, essence, extract, or synthetic product) added to the chocolate mass.

No one can argue against public preference for vanilla flavoured chocolates, since, if it exists, it exists, and manufacturers would be fools to ignore it. On the other hand, it is indubitably a fact that the manufacturers have played upon the public in this direction, and by giving the people chocolate heavily flavored with vanilla and made from poor quality cacao of insipid character, have destroyed the taste for naturally flavored

chocolate. Moreover, the competition of firms setting out to produce the largest bars, tablets of milk chocolate and chocolate-covered confections for 5c and 10c has similarly deprived the public of any possibility of tasting chocolate at its natural best, and the use of excessive vanilla covers a multitude of sins, among others enabling the manufacturers to use increasingly large quantities of the cheapest grades of cacao such as Sanchez and Accras.

Enhanced or Disguised?

It is true that since the invasion of vanilla-swamped so-called "chocolate" there are very few popular brands of chocolate on the market that are not artificially flavored, yet in the art of food preparation, which is indeed an art as well as a science, it is recognized that essences and extraneous perfumes and condiments should be added in such a manner as to enhance the natural

flavor of the particular foodstuff and not to disguise it. It is here that the French chef will always excel, for he does not add his sauce to the soup-stock, or his flavor to the confection by cubic centimeters but drop by drop until



s. Only tongue can detect their presence, since in appearance all coatings look very much alike.

CHOCOLATE "AU NATURAL"



One is led to wonder whether the object of chocolate flavoring is to enhance the natural flavor of the cacao bean or to disguise it beyond all hope of recognition.

his palate tells him that the point of perfection has been reached, until the sauce or the flavor has brought out the desired effect without even the most delicate palate being able to detect what has been added to secure the result. That is art, and science can help in producing perfection.

There is yet another point about the use of chocolate, as such, in the candy business that can not be ignored. This is the age of milk chocolate and chocolate candies, both, it will be observed, confections in which the cacao bean plays a comparatively insignificant part by weight. In the case of most modern milk chocolates, I am inclined to think that the addition of any part of the cacao bean is superfluous except in order to conform to law, and that any pale, brown-colored, sweet, fatty, finely divided, smooth mass flavored with vanilla would suit the public taste, as it obviously does now. In any case, the old original milk chocolate in which the fine quality of the cacao was an asset is seldom seen and most difficult to obtain.

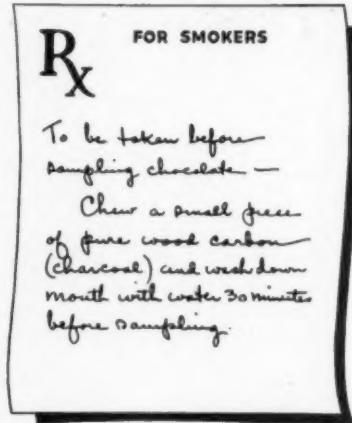
Milk Chocolate Then and Now

The world is forgetting that the first milk chocolate was entirely different from and a more pleasing confection than the product found on every street corner in any large city today. In this past era when quality was considered, there was more thought given to the cacao most suitable for blending with the milk solids than to the style of the wrapper which, with all its sim-

plicity, has been slavishly copied from one end of the Globe to the other, or to how it should have been advertised. And, if milk chocolate were a new creation it is impossible to believe that it would be allowed to be launched on the market in a simple brown glazed paper wrapper or without its appearance being heralded as preserving that school girl complexion or as a necessity for three out of every four.

As for chocolate candies, one may continue to ask why manufacturers insist on coatings ground to the finest degree, or should waste time on such considerations as flavor when they use the product for covering gritty and brittle hard-bakes and biscuits, or fondant creams strongly flavored with peppermint, quite regardless of the capacity of any special chocolate flavor for blending with any of the many strong foreign flavors commonly employed. The same chocolate is generally used for covering any type of candy. All these confections, however made, are good and appear to be popular, but the quality of the chocolate used for coating is comparatively unimportant when the centers are gritty and unduly highly flavored.

Yet in spite of this rule, which we deplore, we can fortunately find occasional exceptions, and there do exist milk chocolates having a delightful chocolate aroma blending perfectly with the creamy milk, and some chocolate candies, fruit centers, and nougats so delicately flavored that their union with a fine chocolate becomes a joy. And it is to the manufacturers of these quality articles that I would address my subsequent remarks.



The Press in 1928 Has Been Good to the Candy Industry

A Review of Candy in the Press for 1928

BY C. S. CLARK

Director, Advertising and Educational Department, National Confectioners' Association

1928 was a progressive year in the candy industry!

The slogan adopted by the candy industry a year ago "1928 is Our Year" has proved to be a winner.

True our industry received some jolts during the year. It required Dr. Herman N. Bundesen, president of the American Health Association, to startle the manufacturers into the realization that candy is a food in its finest form and good for the health. Next came the revolutionary series of magazine advertisements based on the food and health value of candy.

It required a courageous advertising committee to suggest the use of the advertising headlines "Candy for Health," "You Can Get Thin Comfortably on Candy" and "Do You Eat Enough Candy?"

Then came the advertising of a cigarette manufacturer with the suggestion "Reach for a cigarette and not for a Bonbon." Immediately there was an united industry with manufacturers, jobbers, retailers and others in the industry working together harmoniously and cooperately to increase candy consumption.

Yes, "1928 is Our Year"!

The press has been generous to the candy industry during the past year. The advertising and educational work has been backed up 100 per cent by the trade press who have printed hundreds of columns of editorials, news stories and advertisements about the plans to increase candy consumption by removing the prejudices against candy and to show the consumer



C. Seymour Clark

that candy is not fattening, bad for the teeth or injurious to the health.

The trade press publicity has been the background for the advertising and sales campaigns of manufacturers, jobbers and retailers—and for the educational work with salesmen and sales persons to show them how to properly merchandise and display candy on the counter and in the show windows. Our slogan "Sweeten the Day with Candy" has been popularized and become generally used through the aid of the press.

Newspapers and magazines have carried hundreds of columns of news and facts about candy during the past year to millions of readers. The total circulation of the publications with candy information has been in excess of 50,000,000 some months. One radio hook-up carried the story of candy to an estimated audience of 25,000,000.

Hundreds of columns of paid newspaper advertising space were used to promote Candy Week and "Sweetest Day." The success of this candy occasion in many cities was due to the cooperation of the press and the generous use of newspaper advertising. In consideration of the patronage of the advertising columns the newspapers were most liberal in printing news stories and giving publicity to "Sweetest Day."

A total of 197 columns of newspaper clippings reached headquarters from newspapers during October with a total circulation of 44,409,826. From these figures it is easy to realize what a vast amount of desirable publicity candy received which cannot help but greatly aid in increasing candy consumption. From many cities comes the information that the candy business has steadily improved since "Sweetest Day." Publicity is always cumulative.

The addresses delivered to gatherings of the industry in two scores of cities during the past year were reported in the press and reached many thousands of people.

(Continued on page 70)

A Voluntary SANITARY CODE

Submitted to the Confectionery Industry
by
THE MANUFACTURING CONFECTIONER
in collaboration with
DR. CAREY P. MCCORD, and Staff
of the
Industrial Health Conservancy Laboratories

The Proposed Sanitary Code falls roughly into two divisions: (1) that portion of it which has been made mandatory by reason of existing legislation, and (2) that portion whose voluntary acceptance is prescribed by enlightened public opinion. The latter precedes the former in point of progress since it is on this that future laws are based. The present installment, however, is concerned with those details of factory sanitation and personal hygiene which are already exacted of the confectioner by the laws and regulations of the various states and municipalities in which the candy is made or sold. Ignorance of these laws is no excuse for violation of their provisions, hence the present attempt to codify these laws in a single manual for the benefit of the conscientious manufacturers who are anxious to comply with the requirements but do not know just where to begin to look for the necessary information.

SEC. I—Statement of scope and purpose of the Code

SEC. II—Glossary of terms used in the Sanitary Code

SECTION III—

Digest of State Laws

on Sanitation and Hygiene in the Candy Industry

This digest of state laws related to the manufacture of candies makes up one section of the "Sanitary Manual for the Confectionery Industry." Other sections will be published in succeeding numbers of this magazine.

Introduction

AS A PRELIMINARY to the compilation of these data, communications were addressed to all state departments of health, labor and agriculture, requesting full information as to all laws and regulations pertaining to the manufacture of confections. From the replies so obtained and from Dunn's "Food and Drug Laws—Federal and State (Anno-

*We have compiled here such sections of the code as seemed applicable to the question of candy manufacture.

tated), 1927-1928," this digest has been made.

Most states base their food and drug regulations on the Federal act of 1906 and as amended thereafter. At times the state code sets forth specifically that these standards are accepted and in other instances the Federal code is repeated either verbatim or in slightly varied terms. Wherever such conditions existed we have indicated this by the words "essentially like the Federal Code." The wording of the "Federal Code"** may be found at the end of the digest. Where the variation from the Federal Code was marked we have indicated the additions or changes.

Under "Sanitary Regulations" we have only indicated the general nature, omitting details except where these seemed noteworthy. The Cali-

fornia law is cited in some detail because of its comprehensiveness and other states have adopted similar laws which have been indicated by referring to the California law.

There are known to be some special measures promulgated under the general powers vested in Health Commissioners, Food Commissioners, etc., which do not appear in Dunn's book, or in our correspondence. These may be of definite benefit from a sanitary point of view, but we have inadequate record of these and are therefore unable to include them here.

Two special items require explanation in this digest. The date which appears in the margin is the last date at which the regulation, code or law was amended or annotated according to Dunn, or in certain instances according to personal communications received from State authorities. "Responsible for Enforcement" means that the State Department or authority indicated in each instance is the agency ultimately responsible for seeing that the laws or regulations are being carried out or enforced, although the actual legal act of enforcement may come from the District Attorney, Attorney General, or some other arm of the law.

ALABAMA

1923—*Pure Food Law* essentially like the Federal Code.

Sanitary Regulations: General sanitary code empowers State Board of Health to prescribe rules and regulations for the inspection and operation of food handling places such as stores, restaurants, hotels, etc. Confectioneries not specifically mentioned.

Specific provisions indicated in communications from Director of Inspections of State Board of health:

"We have required screening and proper sewage disposal and exercised our judgment in making other requirements of individual candy workers."

State Board of Health responsible for enforcement.

ARIZONA

1913—*Pure Food Law* essentially like the Federal Code.

Sanitary Regulations: No general sanitary code. Bakery and dairy provisions only. Confectioneries not provided for.

State Laboratory responsible for enforcement.

THE MANUFACTURING CONFECTIONER

ARKANSAS

1921—*Pure Food Law* essentially like Federal Code.

Commissioner of Mines, Manufacture and Agriculture responsible for enforcement.

Sanitary Regulations: None appear to exist.

CALIFORNIA

1923—*Pure Food Law* like Federal Code with some minor limitations.

Sanitary Regulations: Extensive specifications excerpted as follows:

1. Confectioneries shall be properly lighted, drained, plumbed and ventilated and conducted with strict regard to the influence of such conditions upon the health of the operatives, employes, etc., and wholesomeness of the food therein produced.

2. The floors, side walls, ceilings, receptacles, utensils and equipment shall at no time be kept in an unclean, unhealthy or unsanitary condition and for the purposes of this act unclean, unhealthy and unsanitary conditions shall be deemed to exist if food in the process of manufacture, preparation, packing, storing, etc., is not securely protected from flies, dust, dirt, unsanitary conditions; and if the refuse, dirt, and waste products subject to decomposition and fermentation . . . are not daily removed; and if all trucks, trays, . . . knives, saws . . . and all other utensils, receptacles and machinery are not thoroughly cleaned daily; and if the clothing of operatives, etc., is unclean or if they dress or undress or leave or store clothing in the factory or workplace.

3. Sidewalls and ceilings shall be well plastered or ceiled with metal or lumber, or shall be oil painted, or kept well lime white-washed or otherwise kept in good sanitary condition; all interior woodwork shall be kept well oiled or painted with oil paint, and be kept washed clean with soap and water, or otherwise kept in a good sanitary condition; every confectionery shall have an unpermeable floor, made of cement or tile laid in cement, brick, wood or other suitable non-absorbent material which can be flushed and cleaned with water.

4. Windows and doors shall be provided with (self-closing) screens of not coarser than 14 mesh wire gauze.

5. Every confectionery shall have

The Sanitary Code

convenient toilets, separate from the room where the process of production is conducted. The floors of such toilet rooms shall be of cement, tile, wood, brick or any other non-absorbent material, and shall be washed and scoured daily. Lavatories and washrooms shall be adjacent to toilet rooms and shall be supplied with soap, running water and towels, and shall be maintained in a sanitary condition. Operatives and all persons handling the material from which the confection is prepared, before beginning work or after visiting toilets, shall wash their

"Z"-THAT'S FOR "ZEGRASKA"



hands and arms thoroughly in clean water.

6. Cuspidors for the use of operatives, and all persons shall be provided and each cuspidor shall be emptied and washed out daily, and not less than five ounces of such solution shall be left in each cuspidor while in use. No operative, or other person shall expectorate or discharge any substance from his nose or mouth on the floor or interior sidewalls of any confectionery where the production, manufacture, packing or storing of confection is conducted.

7. No person will be allowed to sleep in work room of confectionery.

8. No person shall be employed who is affected with one or more of the following diseases: Venereal disease, smallpox, diphtheria, scarlet fever, yellow fever, tuberculosis, bubonic plague, Asiatic cholera, leprosy, trachoma, typhoid fever, epidemic dysentery, measles, mumps, German measles, whooping cough, chickenpox or any other infectious or contagious disease.

State Board of Health responsible for enforcement.

COLORADO

1921—*Pure Food Law* essentially like Federal Code.

Sanitary Regulations: Like California laws with some slight limitations. Confectioneries specifically included.

State Food Commissioner and Food and Drug Inspectors responsible for enforcement.

CONNECTICUT

1918—*Pure Food Law* essentially like Federal Code.

Sanitary Regulations: Bakery, dairy and beverage provisions only. Confectioneries not provided for.

State Dairy and Food Commission and Director of State Agricultural Experiment Station responsible for enforcement.

DELAWARE

1921—*Pure Food Law* essentially like Federal Code.

Sanitary Regulations: No general sanitary code. Cannery regulations only. No confectionery provisions.

State Board of Health responsible for enforcement.

DISTRICT OF COLUMBIA

1898—*Pure Food Law* essentially like Federal Code (although this antedates the 1906 law).

Sanitary Regulations: 1925—No person knowing that he is suffering from a venereal disease . . . shall work as a producer of food, when the disease from which he is suffering may endanger the public health, nor shall he be employed or permitted to work in such occupation. 1908—Every manager of a confectionery shall cause the articles of food to be screened effectually or effectually protected by power driven fans so as to prevent flies and other insects from obtaining access to such food. Every manager shall equip his workplace with running water . . . and with facilities and material for the proper washing of the hands of employes and of the cleansing of the workplace.

Board of Health of District of Columbia responsible for enforcement.

FLORIDA

1919—*Pure Food Law* essentially like Federal Code.

Sanitary Regulations: Sanitary code for hotels, rooming houses and restaurants only. No specific confectionery provisions.

Commissioner of Agriculture and

THE SANITARY CODE

The Sanitary Code

State Chemist responsible for enforcement.

GEORGIA

1914—*Pure Food Law* essentially like Federal Code.

Sanitary Regulations: Every place used for the manufacture of any food shall be properly lighted, drained, ventilated, screened and conducted with strict regard for the influence of such conditions upon the health of operatives . . . and for the purity and wholesomeness of the foods therein produced. No other specific requirements.

Enforced by Commissioner of Agriculture, State Veterinarian and State Chemist.

IDAHO

1919—*Pure Food Law* essentially like Federal Code.

Sanitary Regulations: 1925—Require annual inspection of candy factories. Inspections include such items as:

1. Protection of candy from flies, dust or contamination.
2. No rusted tins or iron vessels to be used for cooking.
3. Candy kept in clean place away from dampness and dirty water.
4. Floors, walls, etc., should be kept clean; no grease, dust, etc., allowed to collect.
5. Effective screening of doors, windows, etc.

Extensive provisions for meat packing, hotels and restaurants.

Notable item with reference to employment of diseased persons: No person having tuberculosis in a communicable form as evidenced by finding an open lesion in the chest or tubercle bacilli in the sputum; or who is a typhoid carrier as evidenced by a positive Widal reaction and confirmed by typhoid organisms in the urine or stool; or who has syphilis as evidenced by a positive Wasserman test of the blood, or chancre of the lip or mucous patches or other evidences of the disease in the mouth, throat or nose . . . shall be employed.

Further requirements with reference to examinations: Examination shall be made by the county or city physician and certificate issued by same. The certificate shall be evidence of freedom from such diseases for the period of six months or until such time as the local health officer or sanitary inspector shall

have reasons to suspect the applicant of being a carrier of one or more of these diseases, in which event he may request another examination. A health certificate is required every six months.

State Department of Public Welfare responsible for enforcement.

ILLINOIS

1924—*Pure Food Laws* essentially like Federal Code.

Sanitary Regulations: General sanitary code specifically includes confectioneries. Provisions similar to California law.

State Department of Agriculture responsible for enforcement.

INDIANA

1926—*Pure Food Laws* essentially like Federal Code.

Sanitary Regulations: Code includes confectioneries specifically. Slightly less comprehensive than California laws.

State Board of Health responsible for enforcement.

IOWA

1924—*Pure Food Laws* essentially like Federal Code.

Sanitary Regulations: Code includes confectioneries specifically. Like California law with following additions:

1. No roller or common towels shall be kept or used in the toilet or washroom but individual sanitary paper towels may be provided for use in said places.
2. No common drinking cup shall be kept or used.

State Department of Agriculture responsible for enforcement.

KANSAS

1923—*Pure Food Law* essentially like Federal Code.

Sanitary Regulations: No specific provisions. State Board of Health authorized and directed to publish in state sanitary paper such rules and regulations as are necessary in food inspection.

"In the manufacture of confections we require that all articles entering into the manufacture of these confections shall be kept covered at all times while not in use, and that coloring matter used shall be only certified colors; that each employee shall be furnished with an individual towel. The use of public drinking cup is prohibited in factories. All employees must be free from any

communicable disease, although the law does not require a physical examination before employment. The utensils and building used in the manufacture of confections must be kept in a clean, sanitary condition at all times. This department has direct supervision over all factories where food stuffs are manufactured."

State Board of Health responsible for enforcement.

KENTUCKY

1922—*Pure Food Law* as follows:

Any person who shall knowingly manufacture any candies or sweet meats containing poisonous or noxious ingredients shall for each offense be fined . . .

Sanitary Regulations: Code specifically includes confectioneries. Essentially like California law.

State Board of Health responsible for enforcement.

LOUISIANA

1915—*Pure Food Law* essentially like Federal Code.

Sanitary Regulations: State Board of Health shall prepare a sanitary code which shall contain and provide rules and regulations and ordinances of a general nature for the improvement and amelioration of the hygiene and sanitary conditions of the state.

1924—Code for maintenance of sanitary conditions in buildings used for the purpose of manufacturing any kind of food.

Specific confectionery provisions as follows:

1. No basement or cellar may be used as a confectionery.

2. All candy kitchens must obtain a permit in writing from the parish or municipality Board of Health annually on or before July 1 of each year.

3. All food handlers are required to have medical certificate, renewable each year.

State Board of Health responsible for enforcement.

MAINE

1916—*Pure Food Law* essentially like Federal Code.

Sanitary Regulations: 1917—State Commissioner of Health empowered to administer the laws relative to sanitation and health and regulations of the department. General sanitary provisions of a limited

The Sanitary Code

type. Confectioneries not specifically mentioned, for example:

Rules and regulations relating to sanitation of public eating and drinking places: These include factories where food is manufactured.

There are stipulations with reference to:

Health of employees—no person suffering from communicable diseases, etc., may work, etc.

Medical Inspection — proprietor, etc., shall require medical certificate, etc. He shall institute and maintain a medical inspection of all of his employees at intervals of at least twice a year.

No carriers of communicable diseases shall be employed.

Place, and employees to be kept clean.

Doors and windows to be screened.

Analysis of water supplies demanded where private supplies are in use.

State Department of Health responsible for enforcement.

MARYLAND

1924—*Pure Food Law*. No person shall manufacture or sell candy of any kind whatsoever which contains any ingredient which may be deleterious or poisonous to the consumer. Adulterated candy defined as that containing "terra alba or any poisonous drug or narcotic or any poisonous substance."

Sanitary Regulations: Code specifically includes confectioneries. Essentially like California law.

State Board of Health responsible for enforcement.

MASSACHUSETTS

1921—*Pure Food Law* like Federal Code with the following additions:

1. Whoever sells to a person any candy enclosing or containing liquid or syrup having more than 1 per cent of alcohol shall be punished . . .

2. Whoever manufactures any confectionery containing or coated with arsenic shall be punished . . .

Special provisions with reference to chocolate:

1. Chocolate in cakes shall be made in pans which shall be stamped with the name of the manufacturer, the town, the quality of chocolate, indicated as No. 1, No. 2

or No. 3, as indicated below, together with the letters M A S S.

2. Brand No. 1 shall be made of cocoa of the first quality; brand No. 2 shall be made of cocoa of the second quality; brand No. 3 shall be made of the inferior grades of cocoa. Each shall be free from adulteration.

Sanitary Regulations: 1924—No specific code. Blanket provisions include confectioneries specifically:

Unless another penalty is heretofore provided, whoever manufactures food in an unclean or unsanitary or unhealthy establishment or under unclean or unsanitary or unhealthy conditions shall be punished . . .

The Department of Public Health is empowered to take cognizance of the interest of health and life of the citizens of the Commonwealth, to make sanitary investigations and inquiries relative to the effects of employment, conditions and circumstances on the public health.

State Department of Public Health responsible for enforcement.

MICHIGAN

1915—*Pure Food Law* essentially like Federal Code.

Sanitary Regulations: 1922—No general sanitary code. Confectioneries not specifically mentioned. Two special provisions as follows:

1. No person who is affected with any infectious disease or with any venereal disease in a communicable form shall work or be permitted to work in any place where food is manufactured. Whenever required by any local health officer any person so employed shall submit to a physical examination.

2. It shall be unlawful to permit filthy or unsanitary conditions to exist in the operation of any place in which food is manufactured and it shall be unlawful to keep in any place where food products intended for human consumption are kept any article for sale as food if same is diseased, decomposed, putrid, infected or tainted.

State Dairy and Food Commissioner responsible for enforcement.

MINNESOTA

1923—*Pure Food Law* essentially like Federal Code with addition of "coal tar dyes," saccharine as adulterants.

Sanitary Regulations: Code con-

tains only limited number of requirements, as follows:

No person, firm or corporation shall operate a confectionery if the same is in a filthy, unclean or unsanitary condition.

It shall be unlawful for any person to work in, on or about any confectionery whose condition is such that disease may be spread to his associates directly or through the medium of milk, etc., whether such condition be due to a contagious, infectious or venereal disease in its active or convalescent stages or to the presence of disease germs, whether accompanied by or without any symptoms of the disease itself.

State Dairy and Food Commissioner has responsibility for enforcement.

MISSISSIPPI

1917—*Pure Food Law* essentially like the Federal Code with the following additions:

Any food substance shall be deemed adulterated when it contains any added boric acid or borates; salicylic acid or salicylates; formaldehyde; sulphurous acid or sulphites; hydrofluoric acid or other fluorine compounds; dulcine; glucose; saccarin; beta-naphthol; hydronaphthol; abrastol; asaprol; oxide of nitrogen, nitrous acid; compounds of copper; or other ingredients not specifically mentioned in this paragraph which are deleterious to health; or if in the case of confectionery it contains any of the substances mentioned in the paragraph or any mineral substance, alcoholic liquor, etc.

If any person manufactures candy in which any preparation of lime is used he shall be punished.

State Chemist responsible for enforcement.

Sanitary Regulations: No general sanitary code. Special sanitary regulations promulgated by the State Board of Health similar to the California law.

State Board of Health responsible for enforcement.

MISSOURI

1919—*Pure Food Law* essentially like Federal Code.

Sanitary Regulations: Code specifically includes confectioneries. Similar to California law.

State Food and Drug Commission and State Industrial Inspector responsible for enforcement.

(Continued in next issue)

Sweet Food Industries Mobilized for Mass Attack

A National Food Products Protective Committee organized to defend sweet foods industries against unfair and untruthful advertising

C. S. CLARK—A. P. AMES
Secretaries

PROMPTED by the recent advertising which urges the smoking of cigarettes as a health measure in place of the eating of "sweets," a national organization is now being formed for the purpose of protecting the sweet food industries against all forms of unfair and derogatory propaganda. The immediate purpose of the new organization is to acquaint all branches of the sweet food trades with the nature of the attack now being carried on by a leading tobacco company, and to circulate information that will assist them in answering and refuting the statements made by this advertising.

The decision to organize this body, to be known as the "National Food Products Protective Committee," was made at a meeting attended by 21 representatives of various trade associations and leading firms representing the sweet food industries, held at the New York Advertising Club on November 23rd. This meeting resulted in the adoption of a statement, which will serve as a platform of the defense campaign now under way, and in the appointment of an Organization Committee which is now raising a central defense fund among all the industries affected.

The committee has established headquarters at 468 Fourth avenue, New York, Suite 1601. C. S. Clark and Allan P. Ames, who have been closely identified with the cooperative educational and advertising campaign of the National Confectioners' Association, are acting as secretaries.

The proposed campaign would organize every group, company and individual in the sweet food industries for defense work, each in his own field and locality.

Suggestions are invited from trade association secretaries and managers, and all others interested as to the campaign efforts to be adopted. The letter points out that the purpose of the Organization Committee is not to form a super-trade association, but a representative committee which can function quickly and forcefully in meeting such emergencies as that presented by the present anti-sweets advertising. The members of the permanent organization, to be known as the National Food Products Protective Committee, will be those individuals who are chosen as representatives by the different trade groups represented. This committee also will be empowered to invite to its membership representatives of leading firms and corporations in addition to the representa-

tives chosen by associations and trade groups. The plan presented was discussed and approved at the New York meeting of November 23rd.

The National Confectioners' Association has already got under way in this movement with letters to its members enclosing reproductions of the anti-sweets cigarette advertising and information about the proposal to organize a national defense committee. This association has set up quotas for every city where it has members and is proceeding with the collection of a large fund.

The National Sugar Brokers' Association has addressed a circular letter to its members calling attention to the cigarette advertising as "an unfair attack on an industry of far reaching proportions" and asking them to use their influence, each in his own community, "to offset the effects of this injurious advertising."

The Organization Committee already has received many inquiries regarding the plans of the campaign and offers of help. The committee realizes that its first task is one of organization and that whatever action is taken will be effective in proportion to the number of different elements in the sweet food industries that take an active part in this movement.

The Press in 1928

(Continued from page 65)

The industry has been productive of real news during the year 1928 and the press has been keen and eager to give its public the result of research and information that has been made available. To the press of the country the candy industry owes a lasting debt of gratitude for its aid and cooperation during 1928.

There is ample opportunity for increased business for all of us—if we will go after it vigorously—and properly merchandise and advertise our products.

Business this year was just as good as each firm or individual made it. It will be just as good in 1929 as we make it. It is entirely up to each of us.



INSTITUTE

An impartial reader service devoted to the analysis and discussion of the new or novel methods of manufacture, supplies and equipment.

Genuine Maple—

An Important Development in Confectionery Flavors

FOR the first time in the history of the industry, genuine maple has been offered to the confectioner in concentrated and usable extract form. The commercialization of this flavor has been made possible by the researches of Doctors Sale and Wilson of the U. S. Department of Agriculture, and is covered by public patent, thus forever protecting it from exploitation at the expense of the public.

To the candy and ice cream manufacturer "maple flavor" has hitherto suggested but one of two things; on the one hand, a bulky, expensive and wasteful product that had a nasty habit of "draining off" when carried in storage for too long a period and of interfering with batch standardization by reason of its high and un-uniform invert content; on the other hand it suggested a number of artificial concoctions which, while offering varying resemblance to true maple, are nevertheless very much alike in their underlying formula of fenugreek, esters and ethers. In many candies, whether because of excessive bulk, price or the pronounced "doctoring" tendency of pure maple sugar, true maple products could not be used, and in consequence there developed a constantly increasing demand for the imitation products. Under such circumstances it is not to be wondered at that the Department of Agriculture labeling requirements were not strictly enforced, and many a product, innocently enough perhaps, appeared on the market proclaiming its identity as "maple"—this or "maple"—that, when according to the letter of the law it should have been labeled "imitation maple" flavored cream or kisses flavored with artificial maple flavor.

With the Department of Agriculture a party to the new development and seven or eight states clamoring noisily for government protection of their infant flavor industry, it can hardly be expected that this tolerant attitude on labeling will long continue, and perhaps this is fortunate for the confectioner who needs most to be protected from himself.

It may seem paradoxical that this new maple flavor which must be derived from a comparatively high-priced article such as maple sugar should be offered to the trade on a basis which provides the full flavoring strength of 10 lbs. of genuine maple sugar at a cost of less than 65c. Obviously, 65c would only buy 3 or 4 lbs. of maple sugar. One pound of the extract is claimed to possess at least 60 times the flavoring strength of 1 lb. of maple sugar. Maple sugar ranges in price from 15c to 30c a pound, according to market conditions. The extract can be purchased materially under \$5 per pound, thus showing a tremendous economy over the use of maple sugar.

The puzzle is solved when it is recalled that genuine maple sap as it runs from the tree is practically flavorless. During the subsequent process of boiling and concentration the flavor is strengthened out of all proportion with the degree of concentration. There was no reason for assuming that this enhancement of the flavor ended with maple sugar and the discovery of Doctors Sale and Wilson and subsequent researches of houses like Fritzsche Brothers are thus very real contributions to the progress of the candy industry.

An interesting sidelight on the introduction of genuine maple flavor

is the renewed impetus which the development seems destined to give to reforestation in maple-producing areas. There is every reason to believe that the extension of the market for maple products, by increasing the return from maple groves, will exert a salutary influence upon the movement for conservation of America's priceless forest resources.

The flavor is readily soluble in water, syrup and glycerine, and this property, coupled with its high degree of concentration, its convenience and economy of transportation, storage and use, will open up to the confectioner many fields hitherto closed to this romantic and truly American flavor.

The British Industries Fair

A London correspondent reports that the British Industries Fair, which is organized by the British Government and the Birmingham Chamber of Commerce and which opens at London and Birmingham, England, simultaneously on February 18, 1929, is breaking all previous records. There will be a special confectionery section. Reports show that all available space at the White City in London has been taken and the Birmingham Chamber of Commerce have been obliged to restrict exhibitors to the barest minimum at Castle Bromwich in Birmingham.

The last Fair was an outstanding success and was visited by well over 100,000 trade buyers. Every country in the world sent numerous representatives and buyers from the United States reported that they found the Fair of the greatest value and that they were saved a great deal of time and trouble in getting their requirements.

British Consulates in all parts of the world are provided with complete information regarding every section of the Fair and trade buyers can also obtain from them the official admission cards, free passport visas, etc.

Runkel Brothers to Continue Under Direction of Maurice and Ernest Fieux

Maurice Fieux, former vice-president, has been made President of Runkel Bros., succeeding his uncle, the late Louis Runkel, and Ernest D. Fieux becomes vice-president.

The naming of the new officers is a nominal change only, for both Maurice and Ernest D. Fieux are sons of Adhemar Fieux, and nephews of Herman and Louis Runkel, the originators of Runkel Bros., and have been with the firm for many years.

Plans for the growth and certain adjustments towards greater efficiency in various departments are under way. A. M. Mullens, formerly of the Chicago branch, will take charge of the coating sales department, with his headquarters at the factory in New York.



In recognition and in appreciation of the part they have played in this greatest of years in "Over a Century" of manufacturing, we extend to our business friends, and to all others of the Confectionery Industry, our sincere wish for a very Merry Yuletide and a New Year of health, of happiness, and of boundless success.

BAKER PERKINS COMPANY, Inc.
250 PARK AVE., NEW YORK CITY

GENERAL OFFICES AND FACTORY
SAGINAW, MICHIGAN, U. S. A.

Baker Perkins Chocolate and Candy Machinery

The GAY Bunny Brigade

These bright, cheery little fellows, tied atop your package goods or holding some specialties, possess a personality that irresistibly attracts the attention of the potential buyers.

They add a charming touch of sales appeal that promotes extra sales—and incidentally add to your dealers' profits.

Made of quality plush in delightful color combinations—8" to 36" high. Write for literature and prices today.



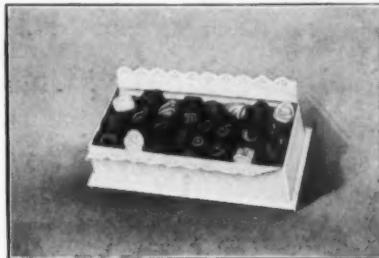
GAY STUFFED TOY & NOVELTY CO.

260 Stone Avenue

Brooklyn, N. Y.

YOU LOSE!

Many dollars every year because candy in your window display melts or becomes stale.

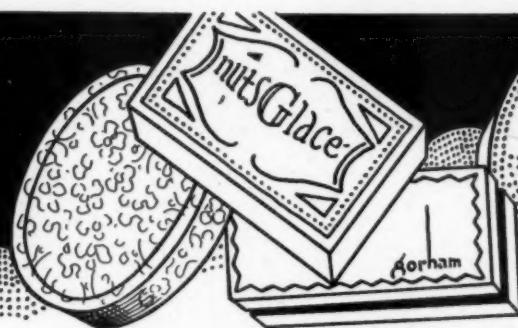


The candies in this illustration are not real chocolates or bon bons, but faithful reproductions created through our new patented process. They have the same size, shape, grain, color and texture of the actual candies, yet last indefinitely without losing their perfection. They withstand a temperature of 140 degrees and will not become discolored by dryness as chocolates do.

Write for interesting booklet "Through the Window" which contains display-helps for the confectioner.

REPRODUCTIONS CO.

311-15 Center Street,
Jamaica Plain, Mass.



WARE Fancy Papers for the Candy Box Beautiful

Ware Fancy Papers offer a line to the confectioner for boxes which are distinctive and appealing.

They are New—They are Different.

Send for sample books and working sheets.

McLaurin-Jones Company

Brookfield, Mass.

150 Nassau St.,
New York

1843 Transportation Bldg.,
Chicago

MC LAURIN-JONES COMPANY, Brookfield, Mass.	
Please send me sample books and working sheets on your WARE FANCY PAPERS free of charge.	
Name
Address



THE MASTER DOCTOR

Nulomoline is the Master Doctor for all candies containing a high percentage of sugar.

Nulomoline will give you control over fermentation, drying and graining.

Hard candies, creams, marshmallows, fudges, caramels, nougats—all grades of candy including penny goods, bar goods, package goods—are made and kept in better condition by Nulomoline. Make a test with Nulomoline and note the improvement in your goods.

*Order a trial case or barrel and ask for our booklet—
The Helper—containing full working instructions.*

The NULOMOLINE Co.

109-111 WALL STREET

NEW YORK, N. Y.



SENNEFF'S

Specialties for Quality Candies

Let us send you formulas and practical information on developing candies of character

1—**EGG O CREME** for those creamy flowing centers with a quality appeal.

2—**X-L CREAM CARAMEL PASTE** with a richness of flavor true to its name. **Senneff's XL Cream Caramel Paste** contains a large percentage of real, pure sweet, rich cream—It adds a delightful flavor so essential to good caramels—guaranteed not to turn rancid, sour or curdle.

3—**NOUGAT WHIP**—It will go farther, make fluffier candy and hold moisture better than any product on the market that is being used for same corresponding purposes.

SENNEFF HERR CO.,
Sterling, Illinois.

Send copy of your Candy Makers' Guide containing practical formulas—no obligation.

Name

Per

Address

CLINTON

CORN SYRUP
CORN STARCHES
CORN SUGAR Refined

The purity and method of manufacture of these products make them especially desirable for confectioners' use.

GIVE PERFECT RESULTS
IN ALL KINDS OF CANDIES

Manufactured By

CLINTON CORN SYRUP REFINING COMPANY
CLINTON, IOWA



ESSENTIAL OILS
and Kindred Products

Flavors of Superior Quality

Banana Flavor No. 199, \$3.00 per lb.
Non-alcoholic

Raspberry Flavor No. 200, \$3.00 per lb.
Non-alcoholic

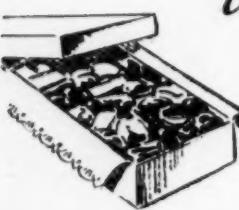
Black Walnut Flavor . . . No. 155, \$5.00 per lb.
Concentrated Non-alcoholic

Black Walnut Flavor . . . No. 156, \$2.25 per lb.
Non-alcoholic

DODGE AND OLcott COMPANY
87 Fulton Street New York City

"The integrity of the house is reflected in the quality of its products."

Quality and Texture



Your customers will notice the difference if you use KEYSTONE GELATINS. These gelatins improve the palatability of your product and help insure "repeat" business. KEYSTONE GELATINS are unequalled for quality and strength. They have the clarity, sweetness, uniformity and good odor so essential in an edible gelatin.

KEYSTONE GELATINS are made from the finest raw materials and prepared under strictest sanitary conditions. They help to improve the texture, appearance and richness in your product. Try KEYSTONE GELATINS at our expense. Write today for samples.



KEYSTONE GELATINS

THE AMERICAN AGRICULTURAL CHEMICAL COMPANY
MICHIGAN CARBON WORKS

P. O. Box 814

Detroit, Michigan

The Successor to Vanillin

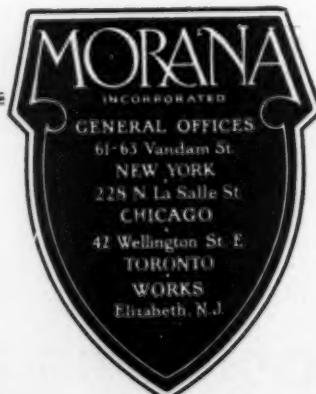
AS the sailing vessel gave way to the steamship . . . as the horse gave way to the automobile . . . so is Vanillin slowly, but surely, giving way to

Bourbonal

Bourbonal, which is also known as "Ethyl Vanillin," was developed in the famous Haarmann & Reimer laboratories that gave Vanillin to the world. In flavor, aroma, tenacity and strength, it far surpasses Vanillin. Chocolate and other confectionery flavored with it have a considerably finer and truer Vanilla taste than when Vanillin is used. Bourbonal will do everything that Vanillin will do, and do it better and more economically.

Let us acquaint you with Bourbonal. We will gladly supply liberal samples promptly upon request and without charge.

Exclusive American Agents



Purity -- Quality -- Uniformity

Three essential considerations in deciding your milk requirements. KNOW THE MILK YOU USE—no need to risk your formulae when you can obtain dry milk which you can trace clear to its source of supply. KNOW that from cow to your plant it is protected in absolute purity.

KNOW that you purchase from a source that insures quality and that this high standard of quality is maintained by an inviolate policy of superiority. KNOW that each and every barrel of every shipment is of definite uniformity, unvarying in freshness, flavor, freedom from adulterants, low bacteria content, high vitamine potency and good keeping qualities.

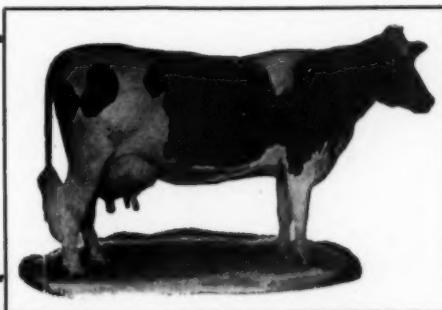
Write us today—let our laboratory staff take the guesswork out of your milk formulae.

THE DRY MILK CO.
15 PARK ROW NEW YORK

Packed in barrels—150 lbs. net. Sold direct—not thru Brokers or Jobbers.

CREMORA—"A"

Dry Whole Milk
27%
Pure Butter Fat



CREMORA—"CS"

Dry Cream
53%
Pure Butter Fat

NATIONAL MALIC ACID FP (Powder)

The ideal acidulent for all confections.

Possesses an extremely smooth, pleasing acid taste, and blends exceptionally well with all flavors.

National Aniline & Chemical Company, Inc.

40 Rector Street, New York, N. Y.

CHARLOTTE
201-203 W. First St.

CHICAGO
357 W. Erie St.

SAN FRANCISCO
145 Second St.

For twenty
years the
leading manu-
facturer of
Certified
Food Colors.



BLACK WALNUT FLAVOR (IMITATION)

FOR the manufacturer who is looking for something new in flavors—here it is!

Black Walnut has much to recommend it. It is new and different from the old line flavors. It has a characteristic taste which is at once distinct and most pleasing. It is not an experiment, since our constantly increasing sales prove beyond doubt that the public likes it.

These are not idle claims. It is quite unusual if a manufacturer does not re-order our Black Walnut once he has adopted it.

Some use it to freshen their present mixtures. Others find it excellent in cream centers. Perhaps the most successful are those who have put out special Black Walnut pieces such as bars, kisses, etc. No matter what flavors you are now using, add Black Walnut and it will prove profitable.

Do not confuse our Black Walnut with ordinary flavor. Ours is a highly concentrated product developed from the very beginning right here in our own factories. It is made only from the highest grade raw materials and not a drop of it leaves our establishment without proper ageing—a highly important factor.

This is why our Black Walnut is an outstanding flavor. It will impart the delightful aroma of ripe, mellow nuts and, while it is lasting, it leaves no musty after-taste. If you are interested in quality products you will find this flavor ideal.

LOOK INTO IT

This flavor actually sells itself. Some of today's largest users started with a sample mailed them. There was no urging and no personal solicitation. Why don't you try it?

(Simply write on your business stationery and we will send you a generous working sample without cost and without obligation.)

ALEX. FRIES & BRO.

Established 74 Years

316 East Second Street
Cincinnati, Ohio



WALTER BAKER COATINGS

Chosen by the trade to coat millions of pounds of confectionery—for these reasons:

1. *Variety*—a complete assortment of tested formulas.
2. *Price Range*—to meet every quality requirement.
3. *Uniformity*—achieved by 148 years of experience.
4. *Value*—because of efficient methods and huge volume.

WALTER BAKER & CO., INC.
DORCHESTER-LOWER-MILLS, MASS.
MONTREAL . . . CANADA



Send for generous batch size sample

The Ferbo Co., Bayonne, N.J.

Slice It
LEEBEN
COLOR—Buy the Brick
(ORIGINATORS)

Cleanliness—a keynote for coloring your hard candy. Colors as pure as they are rich, in natural shades. Only one inch of color to a 70-lb. batch of candy. IT PAYS TO PURIFY.

The LEEBEN CHEMICAL CO.
389 Washington St., New York City
Successors to H. LIEBER & CO., Inc. Est. 1899

Write for samples — get acquainted with real color efficiency, cleanliness and economy.

**PRIDE OF QUALITY
ABOVE
PRIDE OF QUANTITY
DISTINGUISHES**

**Milligan & Higgins'
GELATINE**

for

Marshmallows

Milligan & Higgins Gelatine Co.

New York

Chicago

Cincinnati



SEMCO Specialty Flavors

NO alibis necessary for Semco Products, they are "the goods." Flavors by SEMRAD represent a conscientious adherence to the highest standard of quality and purity.

Suprex Hard Goods Flavors

Specially prepared to withstand heat.

Suprex Root Beer Flavor

Fruit Essence Compound

Concentrated Fruit Flavor

or Wine Ball Flavor

Terpenless Superior Orange, Lemon

and Limes

Concentrated Liberty Lemon and Orange

Fruit Aroma Flavors

Culinary Bouquet Flavors

For cordial work and syrups

Vanilla Extracts

Substitute Flower Flavors

Butter Flavors

Grenadine Flavor

Maple Flavor

Pistachio Flavor

Roman Punch Flavor

Waldmeister Flavor

or May Wine Flavor

Black Walnut Flavor

Fruitine Emulsions

WE are in a position to make any flavor you might have in mind. We will create an individual flavor for your exclusive use.

Write us so we can send you samples and our price list

Merry Christmas and Happy
New Year to all

SEMRAD CHEMICAL CO.

220-224 W. Huron St.

CHICAGO

CENTERS MADE WITH
CONVERTIT ARE PERFECT**No Substitute**

There is no substitute for the enzyme invertase. Nothing that is known to science will take its place.

Convertit is a standardized invertase prepared especially for use in candy.

Convertit will soften your cream centers with scientific certainty after they are coated.

ORDER A POUND AND KNOW THAT YOU
ARE FOLLOWING WHERE SCIENCE LEADS.

THE NULOMOLINE COMPANY

Exclusive Distributors of Convertit
109-111 WALL STREET NEW YORK, N. Y.



CONVERTIT

The highly concentrated invertase of standardized activity

Candy Eaters can be
“Weight - Watchers”
as well—

If you make your candy
with CERELOSE
(Confectioners' Basic Dextrose)

THE quick assimilation of Cerelose makes Cerelose Candies ideal for people inclined to overweight. Being the normal blood sugar of the human body, Cerelose burns quickly and efficiently, becoming instantly available for the energy requirements of the body. Because of its digestibility, Cerelose tends to form tissue, rather than fat.

A model candy research factory has been opened at our Edgewater Refinery for the purpose of assisting manufacturing confectioners with their candy problems. Write us your pet problem today. Generous samples of Cerelose will be gladly furnished upon application.

CERELOSE

(Confectioners' Basic Dextrose)

Product of
CORN PRODUCTS REFINING CO.
17 Battery Place. New York City

WHAT IS CERELOSE?

Cerelose is refined dextrose, a product of the American corn fields. It is absolutely pure and comes to you in the same convenient granulated form as ordinary cane sugar. Chemically, it is identical with the crystalline portion of candied honey.

Seeley & Co., Inc.
True Fruit Extra Concentrates
for
Cream Center Goods

We have special formulae for hard candy.

Among our specialties we have perfected Root Beer Oil for the W. P. Chase Candy Corp. of New York.

May we have the pleasure to submit samples of special high-grade candy flavors.

136 Liberty Street, New York, N. Y.

BRANCHES

G. S. Robins & Co., Inc., 310 S. Commercial St., St. Louis, Mo.	R. H. Lingott, 556 W. Congress St., Chicago, Ill.
Marshall Dill, 216 Pine Street, San Francisco, Calif.	W. A. Susanka, 143 W. Kinzie St., Chicago, Ill.

"WE MAKE OUR WAY BY THE WAY WE MAKE OUR FLAVORS"

Improve Your Caramels --USE GELATINE

SLIGHTEST variation in temperature and consistency of caramel batch often cause trouble in casting and depositing.

You can simplify your caramel casting and eliminate many of your caramel worries by using a little gelatine.

We will gladly tell you how much, when and how to add the gelatine. Other information on the use of gelatine for improving other candies we will also gladly furnish you without charge or obligation.

ATLANTIC GELATINE COMPANY
Woburn, Massachusetts

Chicago: Room 1204, 173 W. Madison Street
New York: Room 92, 1 Hudson Street

Manufacturers of

ATLANTIC GELATINE

GRADE FOR GRADE A BETTER GELATINE

the modern way to caramel quality



TRIAL KEG \$10
*M.B.I.N.S.



* Money Back If Not Satisfied

PURITY +++ UNIFORMITY +++ HIGH BEATING
"U.S. Gel."

SUCH a uniformly high standard of quality as that found in "U.S. Gel." can only be attained through the most painstaking production. Not only is the plant in which "U. S. Gel." is made the largest gelatine factory in the world, but in the development of new equipment, is far advanced.

Because of these facts alone, refinements are possible that cannot be surpassed. Perfect control through every

process yields a product of unvarying uniformity. Glass lined conveyor pipes and storage tanks, double filtration and filtered drying air preserve the fundamental purity of "U. S. Gel."

We will gladly work with you on your candy making problems and offer the services of our research department. The coupon below filled in will bring samples of "U. S. Gel." for testing purposes. Send it at once.

UNITED STATES GELATINE CO., Milwaukee, Wisconsin
Branches NEW YORK CHICAGO CINCINNATI GRAND RAPIDS

UNITED STATES GELATINE CO.
Milwaukee, Wis.

Gentlemen:
Please send us samples of "U. S. Gel." for testing purposes. It is to be used in connection with _____

(fill in type of product)

Name of Company.....

Address.....

City..... State.....



ALWAYS SPECIFY

American CERTIFIED FOOD COLORS

*Send to our nearest address
for prices and samples*

**AMERICAN
ANILINE PRODUCTS
INC.**

For
**Brilliancy,
Solubility,
Uniformity,
Strength**

**Ideal for
coloring
HARD CANDIES,
JELLIES,
PAN WORK, Etc.**

1818 S. Clark Street,
CHICAGO
45 East 17th Street,
NEW YORK



12 Mercer St.,
Toronto, Canada

FACTORY:
LOCK HAVEN, PA.



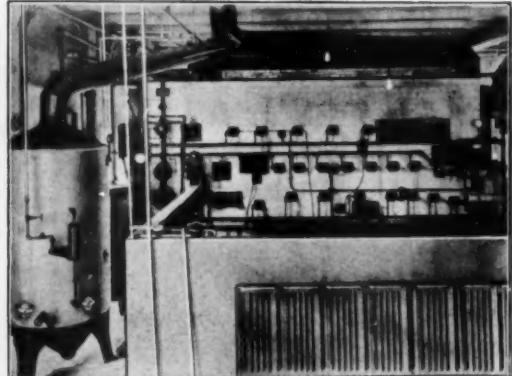
Gas



Fired

BOILERS

HIGH PRESSURE



Confectioner Boiler Equipment
Automatic-Efficient-Dependable
P. M. LATTNER MFG. COMPANY
Cedar Rapids, Ia.

"Acme" Starch Trays

When ready for more Starch Trays, call or write us for prices.
All trays made from kiln dried basswood and surfaced to a smooth finish.

Quality and service at minimum price

Rathborne, Hair & Ridgway Co.
2138 South Loomis St. Chicago, Ill.

PERKINS DRY ROOM
for Drying Gum and Starch

No fans. No motors. Just a quick method of economy, eliminating all fire danger. Sanitary. Not expensive in construction or operation. Especially valuable in drying all gum work.

ELMER E. PERKINS COMPANY
Bradley, Illinois



Have You Seen It?
The Little Wonder

UNIVERSAL COATER

Simple—easy-running—but it will coat a thousand pounds per day with efficiency and economy. Sold at a price within the range of the small confectioner—

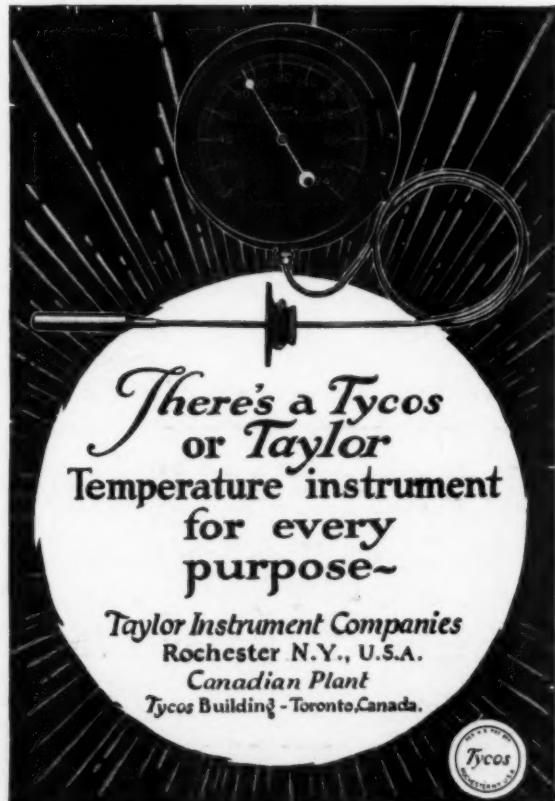
\$975.00

F. O. B. Springfield, Mass.

Write us for details on this little wonder and also on the larger UNIVERSAL Coaters.

Manufactured by

Universal Candy & Chocolate Machine Co.
14 Fisk Ave., Springfield, Mass., U. S. A.



Taylor Instrument Companies
Rochester N.Y., U.S.A.
Canadian Plant
Tycos Building - Toronto, Canada.



No Moisture or Humidity



INSURE MOST FAVORABLE OPERATING CONDITIONS REGARDLESS OF OUTSIDE WEATHER

The photograph shows one section of this successful manufacturer's plant which operates day in and day out for all twelve months of the year. The fact that this plant runs continuously affords tremendous savings not available to the many others suffering from all too frequent shut-downs due to adverse weather. And these savings are reflected in their profits.

In your Cream, Dipping, Crystallizing, Storage, and Packing Department more than enough can be saved with proper Air Conditioning to offset, the first year, the initial investment in apparatus.

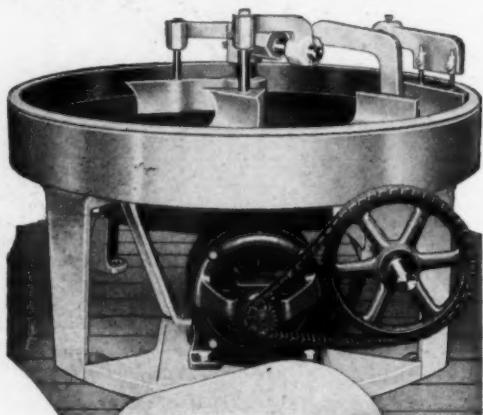
Complete 30-page book —
"Refrigeration In the Candy Factory." — Sent on Request

The COOLING & AIR CONDITIONING CORPORATION
11 W. 42nd Street, New York.



F. & B. CREAM BEATERS

The Standard of Comparison



Made in Three Sizes
(Motor or Belt Driven—Water Cooled)

The most efficient and latest improved beater on the market. They make a smoother cream than can be made by the most expert candy maker. Excellent for hand roll creams—none better.

A more satisfactory cream beater for less money. Guaranteed for two years.

Outstanding Features

The Secret of a Smooth Cream—Scrapers are designed to give the cream a rolling motion in mixing, thereby making a very smooth cream.

Power and Long Service—The bevel gears have a five to one ratio compounded by silent chain drive with five to one ratio which makes a ten to one compound and very powerful. This drive will run for years and requires no attention whatever. All working parts in full view of the operator and can be inspected at any time.

Large Cooling System—Beater is made so that pans can be taken apart and the water jacket cleaned.

No Rust—Inner pan and scrapers are electro plated to prevent rusting.

Send for literature and prices

Dayton Specialty Machine Co.
DAYTON, OHIO, U. S. A.

*Manufacturers of Cream Beaters for
the Confectionery Trade for 28 Years*

TABER PUMPS

for
MANUFACTURING CONFECTIONERS



TABER STANDARD SYRUP PUMP

For pumping over from kettles to cooler or beater, or for transferring syrups from one kettle to another—an economical unit in the confectionery plant.

HOW TO PUMP CORN SYRUP
Bulletin upon request.

TABER PUMP CO.

289 Elm Street

Buffalo, N. Y.



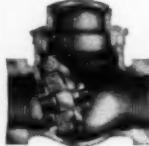
Chocolate Molds



BARS, CAKES, FANCY PIECES
Double Molds for Hollow Figures
PANS—LARGE and SMALL

EPPELSHEIMER & CO.
34 Hubert Street
NEW YORK CITY

For the "one-way traffic" in your pipe lines



Sectional view,
Fig. 352, screwed,
Jenkins Standard
Bronze Swing Check
Valve

Jenkins Check Valves open easily, and are prompt and sure in checking. Made, as all Jenkins Valves are made, for maximum rather than average service, each valve is fitted with Jenkins Renewable disc of resilient rubber composition.

Jenkins Check Valves are furnished in bronze and in iron, in horizontal, vertical, and swing types, standard and extra heavy patterns. They are obtainable through supply houses everywhere.

JENKINS BROS.

80 White Street.....New York, N. Y.
524 Atlantic Ave.....Boston, Mass.
133 No. Seventh St.....Philadelphia, Pa.
646 Washington Blvd.....Chicago, Ill.

JENKINS BROS., Limited
Montreal, Canada London, England



**THE HOTEL
PRESIDENT**

**48th ST. WEST OF BROADWAY
NEW YORK CITY**

*This splendid new hotel just around
the corner from everything offers you
A ROOM AND A BATH FOR \$2.50*

*ROOMS WITH BOTH BATH AND SHOWER \$3.00
ROOMS FOR TWO AT \$3.00 AND \$4.00*

R. McCORMICK, RES. MAN.

The President awaits your visit!

**[Oakite keeps down the cost of
backing up the Sanitary Code.]**



Helps keep washrooms clean and bright

WELL equipped washrooms, kept clean and sanitary, are a paying proposition. They improve morale and promote efficiency among workers. They enhance a plant's reputation for sanitation. That is why ample accommodations of this sort are recommended for every candy factory.

But even porcelain and enamel fixtures, marble walls and rubber, tile or composition floors, cannot be kept in satisfactory condition unless a regular cleaning schedule, with the right cleaning material, is strictly adhered to: "Basins should be cleaned at least once a day. Floors swabbed or mopped twice a week," says the Sanitary Code.

There is nothing like Oakite for jobs such as these. Its vigorous cleaning action quickly loosens every trace of dirt. Its free-rinsing qualities leave enamel surfaces snow-white and glistening—floors free from dangerous slippery films. The speed with which Oakite works saves time and labor.

One of our Service Men will be glad to give you complete information. Write us to have him call. No obligation.

Manufactured only by

OAKITE PRODUCTS, INC., 36C THAMES ST., NEW YORK, N. Y.

Oakite Service Men, cleaning specialists, are located at

Albany, N. Y.; Allentown, Pa.; Atlanta; Altoona, Pa.; Baltimore; Birmingham, Ala.; Boston; Bridgeport; Brooklyn, N. Y.; Buffalo; Camden, N. J.; Canton, O.; Charlotte, N. C.; Chattanooga, Tenn.; Chicago; Cincinnati; Cleveland; Columbus, O.; Dallas; Davenport; Dayton, O.; Denver; Des Moines; Detroit; Erie, Pa.; Fall River, Mass.; Flint, Mich.; Fresno, Cal.; Grand Rapids, Mich.; Greenville, S. C.; Harrisburg, Pa.; Hartford; Houston, Texas; Indianapolis; Jacksonville, Fla.; Kansas City, Mo.; Los Angeles; Louisville, Ky.; Madison, Wis.; Memphis, Tenn.; Milwaukee; Minneapolis; Moline, Ill.; Mobile; Newark, N. J.; Newburgh, N. Y.; New Haven; New York; Omaha, Neb.; Oakland, Cal.; Oshkosh, Wis.; Philadelphia, Me.; Portland, Ore.; Poughkeepsie, N. Y.; Providence; Reading, Pa.; Richmond, Va.; Rochester, N. Y.; Rockford, Ill.; Rock Island; San Francisco; Seattle; South Bend, Ind.; Springfield, Mass.; St. Louis; St. Paul; Syracuse, N. Y.; Toledo; Toronto; Trenton; Tulsa, Okla.; Utica, N. Y.; Vancouver, B. C.; Wichita, Kan.; Williamsport, Pa.; Worcester, Mass.

*Stocks of Oakite Materials are carried in these cities.

OAKITE
TRADE MARK REG. U. S. PAT. OFF.
Industrial Cleaning Materials and Methods

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THE MANUFACTURING CONFECTIONER'S —CLEARING HOUSE—

MACHINERY FOR SALE

MACHINERY FOR SALE—8-inch Newcraft Coater, Full Electric Automatic, coats 1000 lbs. daily. Almost new. Bargain. Installing larger machine. Barbara Frietchie Chocolate Shoppe, Frederick, Md.

MACHINERY FOR SALE—ONE Savage "Papoose" Marshmallow Beater, motor attached. Good running conditions. \$100.00. Address The Wheaton Candy Company, 1349 W. 14th St., Long Beach, Calif.

AN OPPORTUNITY—WHILE they last. We offer a limited number of our last year's model machines, ready for immediate shipment. These machines are entirely new and formerly sold for \$1250. We are discontinuing manufacturing of these models so as to give preference to our new jacketed models. Parts of these machines are interchangeable on our new models, so will always be in stock. Newcraft Coating Machine Co., Inc., Springfield, Mass.

FOR SALE—1 SNYDER HAND roll machine with 20 trays. Used two weeks. Equal to new machine. Excellent working order. Immediate shipment. C. E. McCarren, South and Depot streets, Cincinnati, Ohio.

FOR SALE—CHEAP—TWO 16" Enrobers, with automatic feeders, bottomers, and strokers. Will sell with or without attachments. Address C-3308, care The Manufacturing Confectioner Pub. Co., 30 N. La Salle St., Chicago, Ill.

FOR SALE—MACHINE FOR making after-dinner and also penny mints. This machine is almost new and cost \$750.00. Machine was especially built with steel gears and bronze rollers. Will sell for \$350.00. Address Rittenhouse Candy Co., Worth and Herbert streets, Philadelphia, Pa.

FOR SALE—ONE GAS VACUUM cooker. Close & Company, 312-320 North May St., Chicago, Ill.

MACHINERY FOR SALE

FOR SALE—AUTOMATIC KISS cutting and wrapping machine which has never been used, at a very attractive price. Central Supply House, 41 N. Water St., Rochester, N. Y.

FOR SALE—ONE BARREL TRIUMPH dough mixing machine. Slow speed; in very good condition. Installing larger machine and on that account will sell for cash f. o. b. St. Louis. Price \$175.00. Herz Oakes Candy Company, 806 Olive St., St. Louis, Mo.

FOR SALE—2 COLSETH LIFT trucks in A-1 condition, \$20.00 each f. o. b. Los Angeles. Rose Garden Marshmallow Co., 505 W. 62nd St., Los Angeles, Calif.

FOR SALE—1,500 STARCH boards, outside diameter 16½x30½x2½. Make an offer. 1 12-ft. diameter round packing table with motor complete. C. E. McCarren, South and Depot streets, Cincinnati, Ohio.

FOR SALE—ANY ITEM PRICED low, or entire lot at great bargain: 2 No. 3 candy furnaces, 1 drop frame, 3 sets rolls; 1 kiss cutter; 1 caramel cutter; 1 3 ft. by 7 ft. marble slab; 500 patty rings, 1 thermometer; 1 Champion candy crimper; 1 electric batch warmer; quantity slab irons, copper kettles 1 each 5-10-12-15; 75 starch boards; 1 pr. candy shears, 1 pulling hook; 1 16 in. electric fan; 1 Wagner 2 h.p. motor, shafting, hangers, pulleys, 1 bbl. m.m. beater in iron frame; 1 pastry pin; 1 peanut kettle and basket, and other small tools, all in good condition. Address I-6349, care The Manufacturing Confectioner Publishing Co., 30 N. LaSalle St., Chicago, Ill.

FOR SALE—PACKAGE MACHINERY Co. Kiss Wrapping Machine, Model K. Fine condition. Address C-3306, care The Manufacturing Confectioner Pub. Co., 30 N. La Salle St., Chicago, Ill.

MACHINERY FOR SALE

FOR SALE—WALTER A PEX, double arm dipping machine, with 30 chocolate dipping baskets; National Equip. Co. Springfield depositor for stars and buds, with 1-11 brass deposition pump; set of 4 divisions conges-National Equip. Co. capacity 1600 to 1800 lbs.; National Equip. Co. cocoa bean cracker and separator, capacity 800 to 1000 lbs. per hr.; Wachs ½ barrel paste mixer, hand dump, jacketed bottom; Day dough mixer; Racine sucker machine with one set of rolls; cream breaker and melter made by John Werner. Address I-6350, care The Manufacturing Confectioner Publishing Company, 30 N. LaSalle St., Chicago, Ill.

FOR SALE—STEEL MOGUL MAchine, complete with 20 and 24 outlet pump bars, guaranteed perfect condition. Will sell cheap for quick sale. Address C-3310, care The Manufacturing Confectioner Pub. Co., 30 N. La Salle St., Chicago, Ill.

FOR SALE—ONE WATER cooled slab, 32x76, price \$100 f. o. b. Zion, Ill. Zion Institution & Industries, Zion, Ill.

FOR SALE—3,000 STARCH boards 15½x32", also 3,000 starch boards 14x32". These boards used with mogul. Good condition; with starch. Will sell with or without starch, or starch separately. Address E-5324, % Manufacturing Confectioner, 30 North La Salle St., Chicago, Ill.

FOR SALE—MOULDS FOR making hollow chocolate novelties. Designs for both Christmas and Easter. Earl E. Bortz, 1408 Moss St., Reading, Pa.

FOR SALE—RACINE IMPROVED Automatic Sucker Machine, latest type, dumbbell, and two for five cent and one cent round rollers. Address D-4320, The Manufacturing Confectioner, 30 N. La Salle St., Chicago, Ill.



THE MANUFACTURING CONFECTIONER'S —CLEARING HOUSE—



MACHINERY FOR SALE

FOR SALE: PLASTIC OUTFIT—

2 presses, 1 sizing machine, 1 steam batch roller, 17 sets brass dies, speed controller. Guaranteed first-class condition. A bargain. Savage Bros., 2638 Gladys Ave., Chicago, Ill.

WE HAVE A RACINE AUTOMATIC sucker machine with two sets of rolls, and a Mills cocoanut grater for sale or trade. We need a three foot cream beater. Address H-6347, care of The Manufacturing Confectioner Publishing Co., 30 N. LaSalle St., Chicago, Ill.

FOR SALE—LOZENGE OUTFIT

complete with Lozenge Mixers, reversible heavy Sizing Machine, series of graduated sizes and lozenge press, complete with ten sets of dies. Cheap price for quick sale. Address E-5325, % Manufacturing Confectioner, 30 North La Salle St., Chicago, Ill.

FOR SALE—ONE RICHMOND

E H starch purifier No. 17865, size No. 1, belt drive. Appraised at \$300, November, 1925, by General Appraisal, our price \$50. Five feet ball cream beater, appraised \$625, our price \$200. Copper kettles, various sizes, half price of appraisal. Job lot bar wraps, bar cartons and small packages, cheap. Address W. W. C. Wholesale Company, P. O. Box 1254, Pocatello, Idaho.

MACHINERY WANTED

WANTED—USED WIRE BOX

Stitcher. State price and make. Blackhawk Candy Co., Davenport, Iowa.

MACHINERY WANTED—

Wanted to buy: a used Champion candy crimper for making ribbon candy. Address Green's Candy Shop, 705 Hannibal St., Fulton, N. Y.

I WILL BUY A GOOD SECOND- hand taffy pulling machine if price is right. 25 to 50 lb. batch. Hayes Bottling Works, Topeka, Kans.

COCOA MILL STONE DRESSING done by Henry Reinhardt, 334 West Broadway, New York City.

POSITIONS WANTED

SITUATION WANTED — BY practical candy maker as superintendent or working foreman. Understand hard candies, nougats, fudges, chocolate creams, caramels, marshmallows, jellies, 5 and 10 cent bar goods. Understand all modern machinery; can teach and manage help to advantage, and figure costs. Can give best of references from former employers. Address K-6361, % The Manufacturing Confectioner Publishing Co., 30 N. La Salle St., Chicago, Ill.

SITUATION WANTED — UNIVERSITY graduate with commercial and industrial training would like to make connection with some company that is planning on reorganizing and systematizing its organization for the coming year. Have a technical and practical knowledge in the manufacturing of confections, cost accounting, industrial engineering, production, purchasing and detailed factory and sales research analysis. Will be available after January 15th, 1928. Address L-6366, % The Manufacturing Confectioner Publishing Company, 30 North La Salle St., Chicago, Ill.

SITUATION WANTED — Trained and capable superintendent available. Qualified by a background of twenty years' experience in the supervision of a large factory making a general line of goods. Can manage help, thoroughly conversant with up-to-date machinery, costs and methods of production. Address L-6368, % The Manufacturing Confectioner Publishing Co., 30 N. La Salle St., Chicago, Ill.

SITUATION WANTED — SUPT. middle aged, wants position in wholesale candy factory. Practical man with 25 years' experience. Can manage and teach help in all departments. Open for immediate connection. Can furnish the best of references from former employer. Address L-6365, % Manufacturing Confectioner Publishing Company, 30 N. La Salle St., Chicago, Ill.

POSITIONS WANTED

WANTED—AN ASSOCIATION—

Young man, 20 years' experience in candy business, familiar with every department, practice and sales, here in the U. S. and abroad, desires association with manufacturer who would be interested in development of new factory of a quality line of candies, to be merchandised in an entirely new manner, but not through jobbers or dealers. In order to put the proposition over, \$50,000 to \$100,000 would be needed, although a start could be made with less. Write, stating particulars regarding your present location, as well as any particulars you could entrust to us which will be treated with strictest confidence. Address L-6369, % The Manufacturing Confectioner Publishing Co., 30 N. La Salle St., Chicago, Ill.

POSITION WANTED AS SUPER-intendent or working foreman. Have had 15 years' experience in cream work, marshmallow, fudge and all lines of goods, also cost work. Age 31. Address H-6342, care of The Manufacturing Confectioner Publishing Company, Chicago, Ill.

SITUATION WANTED—AS-sistant superintendent, married, American. Practical. 16 years' experience with large concerns. Thorough knowledge of costs, production of quality goods, and maintaining same. Best of references. Available January 1, 1929. Address C. A. N., c/o The Manufacturing Confectioner, 30 N. LaSalle St., Chicago, Ill.

HELP WANTED

A GROWING AND PROGRES-
sive candy factory requires the services of the very best brokers available for Louisiana, Texas, Alabama, Arkansas and Tennessee. Very liberal brokerage and fullest co-operation. Address MCB, % The Manufacturing Confectioner Publishing Company, 30 N. La Salle St., Chicago, Ill.

THE MANUFACTURING CONFECTIONER'S CLEARING HOUSE

HELP WANTED

HELP WANTED—WE WANT A technical man for our candy and chocolate departments. We are looking forward with great interest for larger improvements in our production system and would like to get in touch with a serious and able man who could bring to us everything modern in our line. Our firm is one of the oldest in Montevideo, South America, and we think there would be good prospects for him, should he happen to be the man we want. Address L-6370, care of THE MANUFACTURING CONFECTIONER, 30 N. La Salle St., Chicago, Ill.

HELP WANTED — EXPERIENCED sales people to handle high class line of box goods both locally and out of town. Only those who have handled high class goods need apply. DeLany's Delights, Inc., 2232 Eighth Avenue, New York City, or P. O. Box 455 Grand Central Station, New York City.

WANTED—A GOOD MAN TO handle manufacture of marshmallows, jellies and gum articles. Would eventually have to go to Oslo, Norway. Prefer man of Norwegian or Scandinavian origin. The department of which this man would be in charge usually employs 9 persons, and the machinery consists of 2 Moguls (National Equipment) and 1 Eroberer. Address Kiellands Fabrikker, Firma Erling Kielland, Box 398, Oslo, Norway.

HELP WANTED.

WANTED—CHOCOLATE DIPPING room forelady. Retail factory, 12 to 15 employees, located in St. Louis. State experience and salary wanted. Address K-6358, % The Manufacturing Confectioner Publishing Co., 30 N. La Salle St., Chicago, Ill.

HELP WANTED—WANTED— Forelady, chocolate dipping, must be able to teach; at present employ 12 to 15 girls. State experience and salary to start. Location St. Louis. Address L-6367, % The Manufacturing Confectioner Publishing Co., 30 N. La Salle St., Chicago, Ill.

HELP WANTED—REPRESENTATIVE for the states other than Indiana, Ohio and Michigan to carry 5c line of bar goods, about 12 popular numbers, and a few bulk specialties. Address L-6371, % The Manufacturing Confectioner Publishing Co., 30 N. La Salle Street, Chicago, Ill.

HELP WANTED — EXPERIENCED salesman with sales ability, who has small amount of capital to invest in a well established business. One who is not afraid to get out and hustle. Address L-6372, % The Manufacturing Confectioner Publishing Co., 30 N. La Salle Street, Chicago, Ill.

BUSINESS OPPORTUNITIES

FOR SALE—BEST PROPOSITION in candy business today. Two fine new rate retail stores; one small well-equipped factory; one jobbing business, all running and making money. Good reasons for selling. Location, Racine and Kenosha. Price \$30,000. M. Tidymann, Racine, Wis.

FOR SALE—WHOLESALE MANUFACTURING popcorn specialty, including trade and trade-mark. Established 15 years. Will teach you the business. Will sacrifice on account of sickness. Address K-6364, % The Manufacturing Confectioner Publishing Co., Chicago, Ill.

CANDY FACTORY BUILDING

FOR SALE OR LEASE—CHEAP because retired from business. Location—Brooklyn, N. Y. Sixty-five thousand square feet of floor space. Six floors and basement; 105x90 feet. Detached corner building; light on four sides. Glucose distributing system throughout building. Two dry rooms; high pressure boilers; 100 per cent sprinkler system; 3,000 pounds capacity elevator. Cheap labor section; experienced hands; two blocks from main railroad depots. Small investment, liberal mortgage and terms. An exceptional opportunity to improve your present quarters or establish a branch factory in over 10,000,000 population metropolitan area. For further information write to E-5323, % The Manufacturing Confectioner, 30 N. La Salle St., Chicago.

FRANK C. GEPHART, Ph. D.

RESEARCH AND CONSULTING CHEMIST
SPECIAL ANALYSES

SPECIALIST IN CHEMISTRY OF
COCOA, CHOCOLATE, CONFECTIONERY

OFFICE AND LABORATORIES

23 East 31st Street, New York, N. Y.

Member Association Consulting Chemists
and Chemical Engineers

FLOATS FOR ALL PURPOSES



One section of our plant is devoted exclusively to the manufacture of metal floats—in copper, brass, steel, nickel and aluminum—all shapes and sizes—for open tank and all pressures. We keep a large stock of copper ball floats from 4" to 12" diameter. Ask your purchasing department to send for our special float catalogue.

ARTHUR HARRIS & CO.
Established 1884
210-218 N. Curtis St., Chicago

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